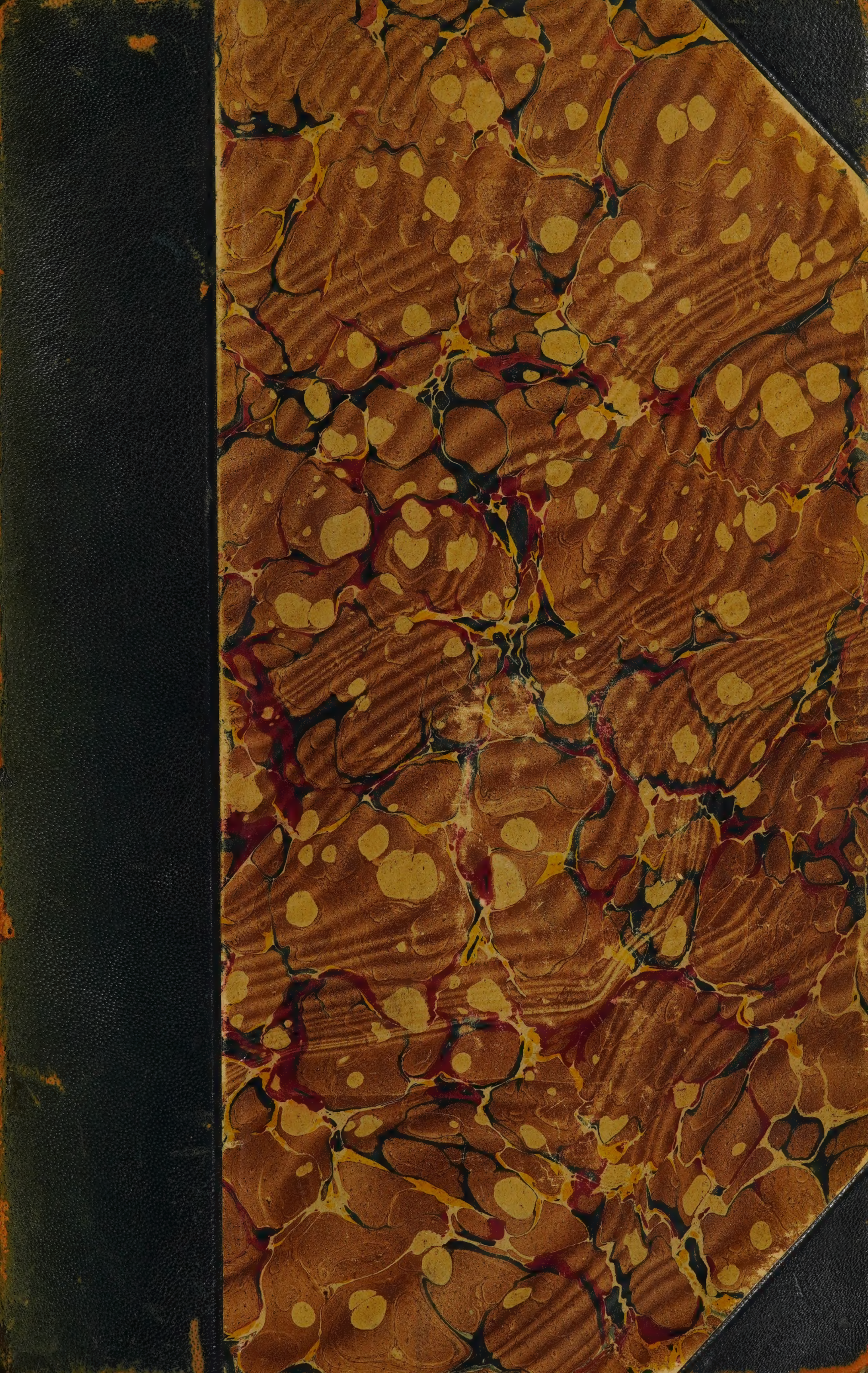

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A COLLECTIVE INDEX

OF THE

TRANSACTIONS, PROCEEDINGS AND ABSTRACTS

OF

THE CHEMICAL SOCIETY

1883—1892

COMPILED
BY
MARGARET D. DOUGAL

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PREFACE.

THIS Index has been compiled under the direction of a Committee appointed by the Council of the Chemical Society, consisting of the Treasurer (Chairman), the Secretaries, the Editors, Dr. Forster Morley, Mr. J. W. Rodger, and Dr. Palmer Wynne. The actual execution of the work was entrusted to Mrs. Dougal, who has been assisted at various times by Mrs. Guthrie, Miss Neale, B.Sc., Miss Green, Miss Morfee, Miss Sharpe, and Mr. D. A. Gracey.

The Committee are indebted for assistance, and for advice as to the arrangement of special subject matter, to Captain Abney, Mr. Michael Carteighe, Mr. Thiselton-Dyer, Mr. Lazarus Fletcher, Professor Percy Frankland, Mr. A. J. Green, Dr. Halliburton, Professor Hummel, Professor Japp, Professor Meldola, Dr. Morris, Dr. D. H. Scott, Professor Tilden, Mr. Tutton, Dr. J. A. Voelcker, Dr. Walker, and Professor Warington. They desire especially to thank Dr. Forster Morley for the great care with which he has read and corrected the whole of the proof-sheets, and for the many valuable suggestions he has made as the compilation was passing through the press.

The work is divided into two main parts: (1) an Index of Authors arranged alphabetically, with the titles of their respective papers in chronological order; and (2) an Index of Subjects.

The general arrangement of each part is self-evident, and calls therefore for very little explanation. With a view to the more certain identification of authors, care has been taken to give their names in full whenever possible. In some instances, however, even the full name has not sufficed, and it has been necessary, as a means of further identification, to add the name of the town or place with which the author is connected. Thus we have Thomas Andrews of Belfast and Thomas Andrews of Sheffield; Hermann Müller of Hersfeld, Hermann Müller of Munich, and Hermann Müller of Thurgau. In the case of Russian authors, whose papers for the most part reach the Society's publications through German sources, the advice of Professor Menschutkin and Dr. Lewkowitsch has been followed in employing the German system of transliteration, as more likely to lead to uniformity of spelling.

Errors in the names of authors found in the Annual Indexes, and discovered in the course of compiling the Collective Index of Authors, were of course rectified before that section of the work was passed for press; other errors detected subsequently when arranging the Subject-Index are given in a separate list on p. vii. A few papers were found to have been omitted from the Annual Indexes, and hence are not given in their proper place in the Collective Index: a list of these "Additional Entries" will be found also on p. vii. Errors of transcription both in the Annual and in the Collective Indexes when detected have also been corrected.

After careful consideration the Committee decided that the Index of Subjects should be essentially, and in the main, alphabetical, but that whenever practicable the substances should also be alphabetically arranged under certain well-defined main groups, *e.g.* alkaloids, carbohydrates, glucosides, terpenes, etc. It was further decided that Agricultural Chemistry, which constitutes a large and to some extent an independent section, should be placed apart.

The Collective Index will be found to differ in many particulars from the Annual Indexes upon which it is based. This was inevitable, as in the earlier Annual Indexes especially, no consistent method of arrangement was followed. Changes of nomenclature were necessarily frequent, and although special care has been exercised that in the Collective Index the same substance should not be entered under different names, it is possible that a few instances of synonyms may have escaped detection. Entries omitted in the subject-portion of the Annual Indexes, discovered in the preparation of the Collective Index, have been duly inserted; others discovered subsequently when the separate sections had been printed off are given on p. ix. In very many cases only the title of a paper appears in the Annual Indexes, and it has been necessary to give supplementary entries as more accurately descriptive of its contents. Hence a large number of additional entries have been made in the Collective Index during its compilation; others of which the desirability was seen later, but which could not be added at the proper time, are given on p. x *et seq.* The list also includes alternative names and double entries omitted from the

Collective Index. Clerical and printer's errors which had escaped detection when reading the proofs have, when discovered, been rectified.

In all cases where these have been definitely ascertained position numbers have been given. The sequence of radicles in the name of a substance, and the nomenclature of acidic and aromatic radicles have been arranged in a more systematic manner than hitherto, and except in cases where the "trivial" name was judged to be too well established to be altered, the name which seemed best to express the constitution of the substance has been preferred. Alternative names have, however, been given, with, of course, cross references. Matters relating to inorganic salts will be found under the name of the particular metal: thus, ferrous sulphate will be found under Iron. In the case of organic salts, where the acid is as a rule the distinctive or significant substance, it has been deemed more convenient to place the entries under the name of the acid: thus barium lactate will be found under Lactic acid. Whenever a prefix, such as ortho, meta, para, iso, secondary, tertiary, mono, di and tri, etc., is not part of the alphabetical arrangement, it is printed in italics.

T. E. T.

ABBREVIATIONS.

T. = Transactions.
P. = Proceedings.
A. = Abstracts.

o = ortho.
m = meta.
p = para.
n = normal.
prim. = primary.
sec. = secondary.

tert. = tertiary.
ψ = pseudo.
d = dextro.
l = laevo.
i = inactive.
s = symmetrical.
as = unsymmetrical.
b.p. = boiling point.
m.p. = melting point.

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p-**Acetamido-*o*-tolylurethane** (Schiff), 1892, A., 1203.

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  *octo*chlor- (Zincke and Kegel), 1890, A., 489.
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ω-**Acetyl*iso*butyric acid** (*α-methyl-β-acetylpropionic acid*) (Thorne), 1885, A., 1200.
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ψ-**Acetyl-α-carbopyrrolic acid** and its methylic salt (Ciamician and Dennstedt), 1884, A., 1045.
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Acetyl*tetra*chlorocrotonic acid, *di*- and *tri*-chlor- (Zincke and Fuchs), 1892, A., 1462.

Acetylchloro*anti*glyoxime (Hantzsch), 1892, A., 694.

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ω-Acetyl-*aω*-diethylhexoic acid and its oxime (Kipping and Perkin), 1890, T., 36.

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Acetyldiketohexamethylenedicarboxylic acid (Feist), 1892, A., 586.

Acetyldimethoxygentisein (v. Kostanecki and Schmidt), 1891, A., 1386.

Acetyl-*o*-dimethyldihydroxythiobenzene (Tassinari), 1889, A., 246.

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5:2:4-**Acetyldimethylpyrroline** (Magnanini), 1889, A., 57.

5:2:4-**Acetyldimethylpyrroline-3-carboxylic acid** (Magnanini), 1889, A., 57.

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- *p*-**Acetyleneanisoil**, bromo- (EIGEL), 1887, A., 1110.
- **Acetylenecarboxylic acids**, synthesis of (FAWORSKY), 1888, A., 1168.
- **Acetylenedicarbamide** (WIDMAN), 1887, A., 34; (FRANCHIMONT and KLOBBIE), 1888, A., 1180.
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- **Acetylene-grouping**, refractive equivalent of (BRÜHL), 1887, A., 193.
- **Acetylenemercury** and its oxychloride (POLECK and THÜMMEL), 1890, A., 119.
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- **Acetylenetetramethyldiureine** (FRANCHIMONT and KLOBBIE), 1889, A., 126.
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- **Acetylenic dibromide**, molecular refraction and dispersion of (GLADSTONE), 1891, T., 295.
- **Acetylenic diiodide**, isomeric varieties of (KEISER), 1890, A., 594; (PATERNÒ and PERATONER), 1890, A., 1219; 1891, A., 654.
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- **Acetyl-α- and -β-ethoxynaphthalenes** (GATTERMANN, EHRHARDT and MAISCH), 1890, A., 964.
- **Acetylethylpyromeconamic acid** (MENNELL), 1885, A., 1204.
- **Acetyl-β-ethylthiophen** (GERLACH), 1892, A., 830.
- **Acetyl*iso*eugenol** (TIEMANN), 1892, A., 46.
- **Acetyleuxanthone ethyl ether** (HERZIG), 1891, A., 1349.
- **Acetylflavenol** (BESTHORN and FISCHER), 1883, A., 600.
- **Acetylfluorescin** (HERZIG), 1892, A., 1319.
- **Acetylformoxime**, action of hydroxylamine on (SCHOLL), 1891, A., 287.
- **Acetylformylcamphor** (CLAISEN), 1891, A., 574.
- **Acetylfurfurine** (BAHRMANN), 1883, A., 799.
- **Acetylglutaric acid** (CONRAD and GUTHZEIT), 1886, A., 337.
- **Acetylglutazine** (STOKES and v. PECHMANN), 1887, A., 155.
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- **Acetylglyoxylic acid phenylhydrazone**, action of phenylhydrazine on (JAPP and KLINGEMANN), 1888, T., 530.
- **Acetylguvacine** (JAHNS), 1892, A., 740.
- **Acetylheptoylmethane** (CLAISEN and EHRHARDT), 1889, A., 851.
- *ω*-**Acetylhexoic acid** (KIPPING and PERKIN), 1889, T., 338; P., 79.
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- **Acetylhomosalicenyl-.** See Acetylhydroxytolenyl-.
- **Acetylhydrastine** (SCHMIDT and KERSTEIN), 1890, A., 649.
- **Acetylhydrastineoxime** (FREUND), 1889, A., 908.
- **Acetylhydrindigotin** (LIEBERMANN and DICKHUTH), 1892, A., 480.

- **Acetylhydrocotarnineacetic acid** (Bowman), 1887, A., 1056.
- **Acetylhydrojuglone** (Bernthsen and Semper), 1885, A., 548.
- **Acetylhydroquinine** (Hesse), 1888, A., 70.
- **Acetylhydroxybenzenesulphone** (Tassinari), 1889, A., 245.
- **Acetyl-*m*-hydroxybenzenylamidoxime** (Clemm), 1891, A., 699.
- **Acetyl-*p*-hydroxybenzenylamidoxime** Krone), 1891, A., 700.
- **Acetyl-*m*-hydroxybenzonitrile** (Clemm), 1891, A., 699.
- **Acetyl-1-hydroxy-1′-ethyltetrahydroquinoline** (*acetylkairin*) (Kohn), 1886, T., 507; P., 210.
- **Acetylhydroxyhydrazobenzene** (Goldschmidt and Brubacher), 1891, A., 1210.
- **Acetylhydroxypæonol** (Nagai), 1892, A., 846.
- **Acetylhydroxypiperidine**, *di*chlor- (Bally), 1888, A., 965.
- *p*-**Acetylhydroxythiocarbanilide** (Kalckhoff), 1883, A., 1110.
- **Acetylhydroxythiophenylcarbimide** (Kalckhoff), 1883, A., 1110.
- **Acetyl-*o*-hydroxy-*p*-tolenylamidoxime** (*acetyl-p-homosalicenylamidoxime*) (Goldbeck), 1892, A., 319.
- **Acetyl-*o*-hydroxy-*p*-toluonitrile** (Goldbeck), 1892, A., 318.
- **Acetyl-*p*-hydroxy-*o*-toluonitrile** (Paschen), 1892, A., 320.
- *β*-**Acetylhydroxy-*α*-truxillic acid** (Homans, Steltzner, and Sukow), 1891, A., 1496.
- *γ*-**Acetyl-*β*-hydroxy*iso*valeric acid** (Obrégia), 1892, A., 325.
- **Acetylindigotin** (Liebermann and Dickhuth), 1892, A., 480.
- **Acetylindigo-white** (Liebermann), 1888, A., 494.
- 1′-**Acetylindole** (Zatti and Ferratini), 1890, A., 988.
- 3′-**Acetylindole** (Zatti), 1889, A., 712.
- **Acetyl*di*iodophenol** (Schall), 1883, A., 1109.
- **Acetylisatic acid**, chemical constitution of (Kolbe), 1884, A., 78.
- **Acetylisatin**, chemical constitution of (Kolbe), 1884, A., 78.
- **Acetyllactic acid** (Siegfried), 1890, A., 128.
- **Acetyllevulinic acid** and its derivatives (Bredt), 1887, A., 126; 1890, A. 863.
- **Acetyl*iso*linusic acid** (Hazura), 1888, A., 816.
- **Acetylmalanil** (Bischoff), 1891, A., 1221.
- **Acetylmalic acid** (Anschütz and Bennert), 1890, A., 363.
- **Acetylmalic-*α*-dinaphthalide** (Bischoff), 1891, A., 1220.
- **Acetylmalic-*β*-naphthil** (Bischoff), 1891, A., 1221.
- **Acetylmesitylene**, action of hydroxylamine hydrochloride on (Feith and Davies), 1892, A., 314.
- **Acetylmesitylic oxide** (Claisen and Ehrhardt), 1889, A., 850.
- **Acetyl-*α*- and *β*-methoxynaphthalene** (Gattermann, Ehrhardt, and Maisch), 1890, A., 964.
- **Acetylmethylic cyanide**, imido- (Holtzwart), 1889, A., 683.
- 2′-**Acetyl-3′-methylindazole** (Auwers and v. Meyenburg), 1891, A., 1377.
- 1′-**Acetyl-3′-methyl*iso*indazole** (Auwers and v. Meyenburg), 1891, A., 1376.
- 1′-**Acetyl-2′-methylindole** (Magnanini), 1888, A., 957.
- 2′-**Acetyl-1′-methylindole** (Magnanini), 1888, A., 957.
- 2′-**Acetyl-3′-methylindole** (Ciamician and Magnanini), 1888, A., 483; (Magnanini), 1888, A., 957.
- **Acetylmethyloximidoacetic acid** (Hantzsch), 1891, A., 445.
- **Acetylmethylpyrroline** (Ciamician and Silber), 1886, A., 719.
  - *di*brom- (Ciamician and Silber), 1888, A., 62.
- *ψ*-**Acetylmethylpyrroline**. See Methylpyrryl methyl ketone.
- 3-**Acetyl-2′-methylquinoline** (*p-acetylquinaldine*) (Berend and Thomas), 1892, A., 1488.
- 3′-**Acetyl-2′-methylquinoline** (Eliasberg and Friedländer), 1892, A., 1107.
- **Acetyl-*o*-methyltetrahydrobenzene** (Kipping and Perkin), 1889, P., 144,
- **Acetyl-*β*-methylthiophen** (Gerlach), 1892, A., 830.
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- **Acetylmethyltrimethylene** (Perkin), 1885, T., 852.
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  - preparation of (Perkin and Stenhouse), 1892, T., 69.
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- **Acetylnaphthastyril** and *di*brom- (Ekstrand), 1886, A., 715.
- **Acetyl-*α*- and -*β*-naphthenylamidoximes** (Richter), 1890, A., 62.

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β-Acetylnaphthol, α-nitro-, molecular transformation of (Böttcher), 1883, A., 1113.

β-Acetylnaphthylglycollic acid (Schweitzer), 1891, A., 729.

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Acetylnitroethylic alcohol (Demuth and Meyer), 1890, A., 858.

Acetyl-*o*-nitrohydroxyazobenzene (Goldschmidt and Brubacher), 1891, A., 1261.

Acetyl*di*nitromethylquinol (Kehrmann and Brasch), 1889, A., 970.

Acetylnitro-opianic acid (Liebermann and Kleemann), 1887, A., 47.

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Acetylopianic acid (Liebermann and Kleemann), 1887, A., 47.

Acetylpæonol (Nagai), 1892, A., 59, 845.

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***p*-Acetylphenetoil** (Gattermann, Ehrhardt, and Maisch), 1890, A., 963.

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  *di*nitramido- (Schiff), 1886, A., 613.

1:2:4-**Acetylphenolbisazotoluene**(Goldschmidt and Pollak), 1892, A., 976.

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Acetylphenoloxychroin (Brunner and Chuit), 1888, A., 363.

αα′- **Acetylphenoxyethane** (Vladesco), 1892, A., 811.

Acetylphenylcarbizine (Freund and Goldsmith), 1888, A., 1187.

Acetylphenyl*di*chlorohydroxypyridone (Zincke), 1890, A., 965.

Acetylphenyl-*p*-coumaric acid, synthesis of (Oglialoro-Todaro), 1884, A., 176.

β-Acetyl-γ-phenyl*iso*crotonic acid (Erdmann), 1890, A., 375.

Acetylphenylecgonine (Einhorn and Klein), 1889, A., 283.

Acetylphenyl-ψ-hydantoin (Pinner and Spilker), 1889, A., 707.

Acetylphenylhydrouracil(Hoogewerff and van Dorp), 1891, A., 197.

1′:3′-**Acetylphenyl*iso*indazole** (Auwers and v. Meyenburg), 1891, A., 1378.

2-Acetyl-1-phenyl-5-methylhydro*iso*pyrazolone (Lederer), 1892, A., 635.

3′-**Acetyl-2′-phenyl-1′-methylindole** (Kohlrausch), 1890, A., 24.

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Acetyl-1-phenylpyrazole and its oxime and phenylhydrazone (Balbiano), 1890, A., 798.

Acetylphenylsuccinic acid, phenylhydrazine derivatives of (Weltner), 1885, A., 793.

Acetylphenylthiocarbizine (Freund and Goldsmith), 1888, A., 1188.

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Acetylpicamar (Niederist), 1883, A., 1005.

Acetylpiperideine (Lellmann and Schwaderer), 1889, A., 903.

Acetylpiperidine, *tri*chlor- (Bally), 1888, A., 965.

Acetylpiperone (Ciamician and Silber), 1892, A., 873.

β-Acetylpropionic acid. See Levulinic acid.

Acetylpropionyl and its derivatives (v. Pechmann), 1888, A., 812.
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Acetylpropionylhydrazone (Otte and v. Pechmann), 1889, A., 1137.

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Acetylpropionylmethane (Claisen and Ehrhardt), 1889, A., 851.

Acetylpropionyl-αβ-phenylhydrazacetoxime (Baltzer and v. Pechmann), 1891, A., 1116.

***p*-Acetylpropylbenzene** and its derivatives (Widman), 1888, A., 1085, 1086.

Acetylpropylic acetate (Lipp), 1889, A., 844.

Acetylpropylic alcohol (Freer and Perkin), 1887, T., 829, 834; P., 95; A., 33; (Colman and Perkin), 1889, T., 352, 357; P., 89; (Lipp), 1889, A., 843.
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Acetylpropylic benzoate (Lipp), 1889, A., 844.

- **Acetylpropylic bromide** (Colman and Perkin), 1889, T., 357.
- **Acetyl*iso*propylic alcohol** (Fittig and Erlenbach), 1888, A., 1053, 1269.
- **Acetyl*iso*propylpyrroline** and its derivatives (Dennstedt and Zimmermann), 1887, A., 598.
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- **α-Acetylpyrroline** (Ciamician and Dennstedt), 1884, A., 289; (Ciamician and Silber), 1885, A., 808.
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- **Biliganine** (Adrian), 1886, A., 816; (Arata and Canzoneri), 1892, A., 894.
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  - ferrocyanide (Holst and Beckurts), 1887, A., 852; (Beckurts), 1890, A., 1318.
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- ψ-**Ephedrine** and its derivatives (Ladenburg and Oelschlägel), 1889, A., 1020.
  - constitution of (Filehne), 1891, A., 1264.
- **Ergotinine** (Tanret), 1885, A., 84; (Bombelon), 1888, A., 970.
- **Eserine**, reaction for (Ferreira da Silva), 1891, A., 1562.
- **Ethylbenzoylecgonine** (Novy), 1887, A., 1126.
- **Ethylbenzoyl-*d*-ecgonine** (Einhorn and Marquardt), 1890, A., 913.
- **Ethyl*apo*cinchenine** (Comstock and Koenigs), 1885, A., 1249.
  - *di*brom- (Comstock and Koenigs), 1888, A., 72.
- **Ethylcinchonamine** (Hesse), 1885, A., 66.
- **Ethyl-*d*-cocaine aurochloride** (Einhorn and Marquardt), 1890, A., 913.
- **Ethylenedimorphine** (*dicodethine*) (Grimaux), 1883, A., 359.
- **Ethylhydrastamide** (Freund and Heim), 1891, A., 92.
- **Ethylhydrasteine** (Freund and Rosenberg), 1890, A., 533.
- **Ethylhydrastine** (Power), 1885, A., 675; (Kerstein), 1890, A., 74; (Schmidt and Kerstein), 1890, A., 649.
  - ethiodide (Freund and Rosenberg), 1890, A., 533.
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- **Ethylhydroberberine** (Gaze), 1890, A., 1012.
  - derivatives (Link), 1892, A., 1499.
- **Fagine** (Habermann), 1885, A., 676.
- **Fumarine** (Reichwald), 1890, A., 272.
- **Galipeine** and its salts (Körner and Böhringer), 1884, A., 341.
- **Galipidine** and **galipine** (Beckurts and Nehring), 1892, A., 642, 643.
- **Gelseminine** (Thompson), 1887, A., 981.
- **Gerontine** (Grandis), 1891, A., 588.
- **Glaucine** (Battandier), 1892, A., 893.
- **Harmaline, harmalol** and **harmine** (Fischer and Täuber), 1885, A., 820; (Fischer), 1889, A., 730.
- *apo***Harmine** (Fischer), 1889, A., 731.
- **Hexahydronicotine** (Blau), 1891, A., 583; 1892, A., 1365.
- ψ-**Homoatropine** (Liebermann and Limpach), 1892, A., 891.
- **Homochelidonine,** α- and β- (Selle), 1891, A., 229.

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- γ-**Homochelidonine** (König), 1891, A., 844.
- **Homo*apo*cinchenine** and its derivatives (Comstock and Koenigs), 1888, A., 72.
- β-**Homocinchonidine** (Hesse), 1890, A., 1166.
- **Homonapelline** (Dunstan and Umney), 1892, T., 393.
- **Homoquinine** (Paul and Cownley), 1885, A., 563, 997; (Hesse), 1884, A., 1384; 1886, A., 83; 1890, A., 1166.
  - synthesis of (Hesse), 1885, A., 276.
  - salts (Hesse), 1884, A., 1384.
- **Hopeine** (Ladenburg), 1886, A., 269, 563; (Williamson), 1886, A., 724.
- **Hydrastaldehyde** (Freund), 1889, A., 1221.
- **Hydrasteine**, constitution of (Freund and Rosenberg), 1890, A., 534.
- **Hydrastine** (Power), 1885, A., 675; (Lyons), 1886, A., 633; (Eijkman), 1887, A., 505; (Freund and Will), 1887, A., 174, 383; (Freund), 1889, A., 627, 908, 1221; 1890, A., 534; (Freund and Lachmann), 1889, A., 1220; (Kerstein), 1890, A., 74; (Freund and Rosenberg), 1890, A., 532; (Heim), 1890, A., 1333; (Freund and Heim), 1891, A., 92; (Freund and Philips), 1891, A., 93; (Freund and Dormeyer), 1891, A., 1518; 1892, A., 223.
  - constitution of (Freund), 1889, A., 1222; 1890, A., 534.
  - derivatives (Power), 1885, A., 675; (Freund and Will), 1887, A., 1057; (Schmidt and Wilhelm), 1888, A., 1212; (Schmidt and Kerstein), 1890, A., 648.
  - alkyl derivatives of (Schmidt), 1890, A., 1167; (Freund and Heim), 1891, A., 92; (Freund and Philips), 1891, A., 93.
  - allylic iodide (Freund and Philips), 1891, A., 93.
  - ferrocyanide (Beckurts), 1890, A., 1318.
  - methhydroxide and methochloride (Freund and Rosenberg), 1890, A., 532.
  - methiodide (Freund and Rosenberg), 1890, A., 532; (Schmidt), 1890, A., 1167.
  - reactions of (v. Hirschhausen), 1885, A., 606; (Lyons), 1886, A., 633; (Vitali), 1892, A., 755.

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- **Hydrastine-ethylammonium hydroxide** (Wilhelm), 1888, A., 1212.
- **Hydrastine-methylammonium hydroxide** (Schmidt), 1890, A., 1167.
- **Hydrastinine** (Freund and Will), 1887, A., 383.
  - constitution of (Freund), 1889, A., 1222.
  - oxidation of (Freund), 1889, A., 627.
  - derivatives of (Freund and Will), 1887, A., 383.
- **Hydrastophthalimidine** (Freund and Philips), 1891, A., 94.
- **Hydroberberine** (Schmidt), 1884, A., 339; (Bernheimer), 1884, A., 340; (Gaze), 1890, A., 1011; 1891, A., 332; (Link), 1892, A., 1498.
  - derivatives (Schmidt), 1884, A., 339; (Bernheimer), 1884, A., 340.
  - ethiodide and related compounds (Gaze), 1890, A., 1012; (Link), 1892, A., 1499.
- **Hydrocinchonidine** and its salts (Hesse), 1883, A., 97.
- **Hydrocotarnine**, physiological action of (Stockman and Dott), 1891, A., 762.
- **Hydrocupreine** (Hesse), 1888, A., 71.
- **Hydrohydrastine** (Power), 1885, A., 675.
- **Hydrohydrastinine** (Freund and Will), 1887, A., 384.
  - preparation of (Freund and Dormeyer), 1891, A., 1518.
  - constitution of (Freund), 1889, A., 1222.
  - derivatives of (Freund and Will), 1887, A., 1057.
  - methochloride (Freund and Dormeyer), 1891, A., 1519.
- **Hydronicotine** (Etard), 1884, A., 464.
- **Hydroquinicine** (Hesse), 1888, A., 70.
- **Hydroquinidine** and its sulphate (Hesse), 1883, A., 602.
- **Hydroquinine** and its derivatives (Hesse), 1888, A., 69.
  - methhydroxide (Hesse), 1888, A., 70.
- **Hydroquininesulphonic acid** (Hesse), 1888, A., 71.
- **Hydrotropidine** and its salts (Ladenburg), 1883, A., 1155.
- **Hydrotropine iodide** (Ladenburg), 1883, A., 672.
- **Hydroxybenzotropeine** and its salts (Ladenburg), 1883, A., 671.

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- **α-Hydroxycinchonine** and its derivatives (Jungfleisch and Léger), 1888, A., 380, 507; 1889, A., 906.
- **β-Hydroxycinchonine** (Jungfleisch and Léger), 1888, A., 380, 507.
- **Hydroxycyanoconiine** and its derivatives (v. Meyer), 1883, A., 352, 354; (Riess), 1885, A., 235.
- **Hydroxyhydrastinine** and its derivatives (Freund and Will), 1887, A., 1057.
- **Hydroxymethylhydrohydrastinine methiodide**, bromo- (Freund and Dormeyer), 1891, A., 1520.
- **Hygrine** (Bignon), 1886, A., 388; (Stockman), 1888, A., 508; (Liebermann), 1889, A., 732; (Liebermann and Kühling), 1891, A., 586.
  - separation of, from cocaine (Howard), 1887, A., 1126.
- **Hymenodictyonine**, the bitter principle of *Hymenodictyon excelsum* (Naylor), 1883, A., 1141; 1885, A., 565.
- **Hyoscine** (Ladenburg), 1884, A., 761; 1892, A., 1366; (Schmidt), 1892, A., 1255, 1498; (Hesse), 1892, A., 1498.
  - hydrochloride, physiological action of (Gley and Rondeau), 1888, A., 182; (Pawloff), 1890, A., 1019.
- **Hyoscyamine**, existence of, in the lettuce (Dymond), 1891, P., 165; 1892, T., 90.
  - conversion of, into atropine (Will), 1888, A., 855; (Schmidt), 1888, A., 970; (Will and Bredig), 1888, A., 1316.
  - salts (Will), 1888, A., 855.
  - relation of, to atropine (Ladenburg), 1889, A., 167.
- **Hypocaffeine** and its salts (Fischer), 1883, A., 356.
- **Imperatorine** (*peucedanine*), reactions of (Brociner), 1890, A., 310.
- **Imperialine** and its derivatives (Fragner), 1889, A., 284; (Jassoy), 1890, A., 1154.
- **Jaboridine** (Harnack), 1886, A., 85.
- **Jaborine** (Hardy and Calmels), 1886, A., 815.
- **Japaconitine** (Mandelin), 1885, A., 911.
- **Jervine** and **ψ-jervine** (Pehkschen), 1891, A., 88.
- **Laserpitine** and its derivatives (Külz), 1884, A., 182.
- **Laudanine** (Hesse), 1884, A., 616.

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- **Laurotetanine**, the active principle of certain Lauraceae (Greshoff), 1891, A., 337.
- **Lobeline** (Paschkis and Smita), 1890, A., 1169.
- **Lupanine** (Hagen), 1886, A., 163; (Siebert), 1892, A., 223.
- **Lupinidine** from *Lupinus luteus*, and its derivatives (Baumert), 1885, A., 177.
  - from white lupins (Campani and Grimaldi), 1891, A., 1521.
  - behaviour of, with ethylic iodide (Baumert), 1885, A., 676.
- **Lupinindine** (Baumert), 1884, A., 1387.
- **Lupinine**, action of acetic chloride and anhydride on (Baumert), 1884, A., 1387.
  - action of dehydrating agents on (Baumert), 1883, A., 100.
  - hydrochloride, from lupinine residues, preparation of (Baumert), 1883, A., 224.
- **Lycaconine, lycaconitine**, and **lycoctonine** (Dragendorff and Spohn), 1885, A., 403.
- **Macleyine** (Eijkman), 1885, A., 404.
- **Mandelic ψ-tropeine** (*ψ-homatropine*) (Liebermann and Limpach), 1892, A., 891.
- **Mandragorine** (Ahrens), 1889, A., 1074, 1222.
- **Mannitine** (Scichilone and Denaro), 1883, A., 50.
- **Meconarceine** (Merck), 1889, A., 906.
- **Meconine** (Wegscheider), 1883, A., 996.
  - action of potassium cyanide on (Bowman), 1887, A., 586.
- **ψ-Meconine** and its derivatives (Salomon), 1887, A., 585; (Perkin), 1890, T., 1072.
- **Methoxyhydrocotarnine methiodide** (Roser), 1890, A., 531.
- **Methoxyquinine methiodide** (Grimaux), 1892, A., 1363.
- **Methylanhydroecgonine methiodide** (Einhorn), 1889, A., 170.
- **Methylarecaidine** (Jahns), 1892, A., 739.
- **Methylbrucine**, ammonium base obtained from (Hanssen), 1885, A., 819.
- **Methyl*apo*cinchenine** and its hydrochloride (Comstock and Koenigs), 1885, A., 1248.
- **Methylcinchonamine** (Hesse), 1885, A., 66.

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- **Methylcocaine** (Liebermann and Giesel), 1890, A., 647, 803; (Einhorn and Marquardt), 1890, A., 913; (Giesel), 1890, A., 1011.
- **Methylcodeine** and its derivatives (Grimaux), 1883, A., 359; (Hesse), 1884, A., 614.
- **Methylcolchicine** (Johanny and Zeisel), 1889, A., 282.
- **Methylconiine** (Passon), 1891, A., 1118.
- **Methylcytisine** (v. Buchka and Magalhães), 1891, A., 750.
- **Methyldeoxystrychnine** (Tafel), 1892, A., 1014.
- **Methylecgonine** (Liebermann and Giesel), 1890, A., 647; (Einhorn and Marquardt), 1890, A., 913.
- **Methylhydrastallylamide** (Freund and Heim), 1891, A., 93.
- **Methylhydrastamide** (Freund and Heim), 1891, A., 92.
- **Methylhydrast*iso*amylamide** (Freund and Heim), 1891, A., 93.
- **Methylhydrasteine** (Freund and Rosenberg), 1890, A., 533.
- **Methylhydrastethylamide** (Freund and Heim), 1891, A., 93.
- **Methylhydrastimide** and its methiodide (Freund and Heim), 1891, A., 92.
- **Methylhydrastine** and its methiodide (Freund and Rosenberg), 1890, A., 532; (Schmidt), 1890, A., 1167.
  - alcoholate and hydroxide (Schmidt), 1890, A., 1168.
- **Methylhydrastomethylamide** (Freund and Heim), 1891, A., 93.
- **Methylhydroberberine** (Giacosa and Soave), 1890, A., 920; (Gaze), 1890, A., 1012.
- **Methylhydrohydrastinine** and its derivatives (Freund and Dormeyer), 1891, A., 1519.
  - bromo- (Freund and Dormeyer), 1892, A., 223.
- **Methylmorphomethine.** See Codomethine under Alkaloids.
- **Methylnarceine** and its salts (Claus and Ritzefeld), 1885, A., 997.
- **Methylquinidine** (Claus), 1892, A., 1250.
- **Methylquinine**, preparation of (Lippmann), 1892, A., 222.
- **Methylstrychnine** (Tafel), 1890, A., 1447; 1891, A., 1263.
- ***iso*Methylstrychnine** (Tafel), 1891, A., 1264.

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- *α*-**Methyltropidine** and its derivatives (Roth), 1884, A., 761; (Merling), 1892, A., 358.
- *β*-**Methyltropidine** (Merling), 1892, A., 359.
- **Methyltropine**, decomposition of, by potash (Ladenburg), 1883, A., 672.
- **Moradeine** (Arata and Canzoneri), 1890, A., 405.
- **Morphine** (v. Gerichten and Schrötter), 1883, A., 221; (Hesse), 1884, A., 613; (Plugge), 1887, A., 280; (Knorr), 1889, A., 905.
  - from *Papaver Rhoeas* (Hesse), 1890, A., 646.
  - from *Escholtzia* (*Eschscholzia*) *californica* (Baudet and Adrian), 1889, A., 644.
  - formula of (Dott and Stockman), 1888, A., 506; (Hesse), 1888, A., 1115.
  - constitution of (Knorr), 1889, A., 417, 906; (Skraup and Wiegmann), 1889, A., 1018.
  - water of crystallisation of (Hesse), 1889, A., 417.
  - cryoscopic behaviour of solutions of compounds of (v. Klobukoff), 1889, A., 933.
  - action of alcoholic potash on (Skraup and Wiegmann), 1889, A., 1018.
  - action of potassium chromate on (Ditzler), 1886, A., 1047.
  - action of sulphuric acid on, in presence of dibasic acids (Chastaing and Barillot), 1888, A., 165.
  - oxidation of (Barth and Weidel), 1884, A., 85.
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  - ferrocyanide (Beckurts), 1890, A., 1318.
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  - detection of, in fatty matters (Focke), 1887, A., 187.
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  - estimation of, colorimetric, in opium preparations (Hinsdale), 1890, A., 1349.
- **Morrenine** (Arata and Gelzer), 1891, A., 1122.
- **Morrhuine** (Gautier and Mourgues), 1888, A., 1315; 1889, A., 63.
- **Myoctonine** (Dragendorff and Spohn), 1885, A., 403; (Dragendorff and Salomonowitsch), 1887, A., 858.
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*iso***Quinine** (HESSE), 1888, A., 379; (LIPPMANN and FLEISSNER), 1892, A., 82.
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Amidocinnamic acids, nitration of (Friedländer and Lazarus), 1885, A., 1138.
  carbamide derivatives of (Rothschild), 1890, A., 1123; 1891, A., 198.
β-**Amidocinnamonitrile** (Holtzwart), 1889, A., 683.
Amidochloro-. See Chloramido-.
Amidocomenic acid, action of phosphorus pentachloride on (Pellmann), 1884, A., 840.
Amido-compounds in the animal system (Bahlmann), 1887, A., 512.
  action of dilute nitric acid on (Norton and Livermore), 1887, A., 1038.
  action of nitrous acid on (Klobbie), 1891, A., 292.
  action of phenylic *iso*cyanate on (Kühn), 1885, A., 260, 979.
  formation of haloid substitution derivatives of, by the reduction of nitro-derivatives of hydrocarbons (Kock), 1887, A., 810.
  formation of thiocyanates from (Gattermann and Hausskneсht), 1890, A., 749.
Amido-compounds, aromatic, action of silicon tetrachloride on (Harden), 1886, P., 251; 1887, T., 40.
Amidocoumarin (Taege), 1887, A., 939; 1891, A., 918.
Amidocresols. See Cresol.
β-**Amidocrotonanilide** (Knorr), 1892, A., 708; (Lederer), 1892, A., 965.
β-**Amidocrotonitrile** (Holtzwart), 1889, A., 683.
Amidocumene. See Cumidine.
p-*di***Amidocumene** (Kehrmann and Messinger), 1891, A., 298.
Amido-ψ-cumenol and the action of acetic anhydride on (Liebermann and v. Kostanecki), 1884, A., 1147.
o-**Amidocuminic acid** (Widman), 1886, A., 466.
*di***Amidocuminic acid** and its hydrochloride (Lippmann), 1883, A., 194.
*di***Amido-ψ-cuminic acid** (Nef), 1888, T., 433.
Amidocumylacrylic acids, *o*- and *m*-, and their salts (Widman), 1886, A., 467.
Amido-ψ-cumylenethenylamidine (Auwers), 1886, A., 144.
m-**Amidocumylpropionic acid** (Widman), 1886, A., 467.
m-**Amidocyanobenzoic acid** (Traube), 1883, A., 192.
Amido*di*cyanobenzoyl, derivatives of (Griess), 1885, A., 1225.
*di***Amido*di*cyanocarboxylic acid.** See Ammelide.
Amido-*p*-cyanophenylacetic acid (Traube), 1883, A., 193.
Amidocyanophenylglyoxylic acid (Griess), 1885, A., 1226.
p - *di***Amido** - *p* - **cymene hydrochloride** (Liebermann and v. Ilinski), 1886, A., 240.
Amidocymenesulphonic acid. See Cymidinesulphonic acid.
p-**Amidodeoxybenzoinoxime** (Ney), 1888, A., 1197.

***di*Amidodicresol,** action of nascent nitrous acid on (Deninger), 1890, A., 38.
Amidodicyanic acid (Wunderlich), 1886, A., 435.
***di*Amido-1:4-diethoxybenzene.** See Diethoxyphenylenediamine.
Amidodiethoxyresorcinol (Will and Pukall), 1887, A., 661.
***p*-Amidodiethylaniline.** See Diethyl-*p*-phenylenediamine.
β-Amidodiethylanilinethiosulphonic acid (Bernthsen), 1889, A., 776.
***di*Amidodiethylic sulphoxide,** picrate of (Cross and Bevan), 1892, A., 130.
***o*-Amidodiethylresorcinol hydrochloride** (Pukall), 1887, A., 662.
***p*-Amidodiethyl-*o*-toluidine.** See Methylethylphenylenediamine.
Amidodihydroindoxyl, derivatives of (Burmeister and Michaelis), 1891, A., 1068.
Amidodihydroxynaphthalene. See Dihydroxynaphthylamine.
4-Amido-2:6-dihydroxypyridine. See Glutazine.
***di*Amidodihydroxyquinone** (Nietzki and Schmidt), 1888, A., 943.
4-Amido-1:3-dimethoxybenzene and its derivatives (Bechhold), 1889, A., 1155.
Amidodimethylaniline. See Dimethylphenylenediamine.
***di*Amidodimethylcarbazole** (Täuber and Loewenherz), 1891, A., 834.
Amidodimethylcyanidine (Tscherven-Iwanoff), 1892, A., 1291.
4-Amido-2:6-dimethyl-*m*-diazine (Schwarze), 1890, A., 1159.
***m*-Amido-βγ-dimethylindene** (v. Miller and Rohde), 1890, A., 1138.
Amido-1:3-dimethylquinoline (Nölting and Trautmann), 1891, A., 328; 1892, A., 729.
Amido-1:4-dimethylquinoline (Marckwald), 1890, A., 1004.
Amidodimethyl-α-resorcylic acid (Meyer), 1888, A., 148.
***di*Amidodimethylstilbene sulphide** (Anschütz and Schultz), 1889, A., 602.
***di*Amidodinaphthyl** and its derivatives (Nietzki and Goll), 1886, A., 245.
***di*Amidodinaphthyl derivatives** (Julius), 1887, A., 56.
***tetra*Amido*iso*dinaphthyl** (Staub and Smith), 1885, T., 106.
1:3′-*di*Amidodinaphthylic disulphide (Ekbom), 1891, A., 573.
1:4′-*di*Amidodinaphthylic disulphide (Ekbom), 1890, A., 994.
3:3′-*di*Amido- and *tetra*-amido-4:4′-diphenol (Kunze), 1889, A., 262.
***di*Amido-*o*-diphenyl** [m.p. 81°] (Täuber), 1891, A., 570.
***di*Amidodiphenyl** [m.p. 125°] (Bernthsen), 1886, A., 471.
***m:m-di*Amidodiphenyl** [m. p. 257°] (Brunner and Witt), 1887, A., 673.
***o:p-di*Amidodiphenyl** [m.p. 45°]. See *iso*Benzidine.
***p:p-di*Amidodiphenyl** [m.p. 122°]. See Benzidine.
***tetra*Amidodiphenyl.** See *di*Amidobenzidine.
***o*-Amidodiphenylamine.** See Phenylphenylenediamine.
2:4-*di*Amidodiphenylamine (Kehrmann and Messinger), 1892, A., 1109.
***tri*Amidodiphenylamine** (Nietzki and Ernst), 1890, A., 1114.
***m*-Amidodiphenylcarbamide** (Leuckart), 1890, A., 760.
α-*di*Amidodiphenylcarbinol (Wichelhaus), 1889, A., 781.
β-*di*Amidodiphenylcarbinol and its compounds (Staedel), 1883, A., 991.
4-Amido-2:6-diphenyl-*m*-diazine, formation of (Schwarze), 1890, A., 1159.
Amidodiphenyldisulphonic acid (Limpricht), 1891, A., 930.
***di*Amidodiphenylene ketone oxide** and its hydrochloride (Perkin), 1883, T., 191.
***di*Amidodiphenyleneazone** (Täuber), 1892, A., 184.
Amidodiphenylene-*m*-phenylenediamine (Fischer and Hepp), 1890, A., 614.
***di*Amidodiphenylenic oxide** (Galewsky), 1891, A., 1234.
***m*-Amidodiphenylmethane** (Becker), 1883, A., 202, 203.
***p*-Amidodiphenylmethane** (Basler), 1884, A., 310.
***p*-Amidodiphenylmethane derivatives** (Manns), 1889, A., 261.
***p-di*Amidodiphenylmethane** and its nitro-derivatives (Gram), 1892, A., 618.
***tetra*Amidodiphenylmethane** and its compounds (Staedel), 1883, A., 991.
4-Amido-2:6-diphenyl-5-methyl-*m*-diazine (v. Meyer), 1889, A., 578; 1890, A., 68; (Schwarze), 1890, A., 1159.
***p*-Amidodiphenylmethylpyrazolecarboxylic acid** (Knorr and Jödicke), 1885, A., 1248.

o-**Amidodiphenylmethylpyrazolecarboxylic anhydride** (Knorr and Jödicke), 1885, A., 1248.

*di***Amidodiphenylphosphinic acid** (Dörken), 1888, A., 834.

p-*di***Amidodiphenylpiperazine**, formation of colouring matters from (Lellmann and Schleich), 1889, A., 904.

Amidodiphenylquinoxaline (Nietzki and Müller), 1889, A., 605.

Amidodiphenylsulphamic acid (Spiegel), 1885, A., 987.

*di***Amidodiphenylsulphone** and its derivatives (Lauth), 1892, A., 1093.

p-**Amidodiphenylsulphonic acid** (Carnelley and Schleselmann), 1886, T., 380; P., 184.

Amidodiphenylthiocarbamides (Lellmann and Würthner), 1885, A., 977.

*tri***Amidodiphenyltolylcarbinol.** See Rosaniline.

*tri***Amidodiphenyltolylmethane.** See Leucaniline.

*di***Amidoditetrahydronaphthylcarbamide** (Bamberger and Bammann), 1889, A., 783.

*di***Amidoditolyl.** See Tolidine.

o-**Amidoditolylamine.** See Tolyltolylenediamine.

2-Amido-5:5′-ditolyl-4:4′-disulphonic acid (Helle), 1892, A., 1467.

di-p-**Amidodi-*m*-tolylic disulphide** (Jacobson and Ney), 1889, A., 771.

Amidodi-*o*-tolyltolylenediamine (Kuhlwein), 1890, A., 371.

*di***Amidodixylyls** and colouring matters derived therefrom (Nölting and Stricker), 1889, A., 135.

*di***Amidodurylic acid.** See *di*Amido-ψ-cuminic acid.

Amidoethanesulphonic acid. See Taurine.

*di***Amidoethoxydiphenyl** (Weinberg), 1888, A., 285.

*di***Amidoethoxydiphenylsulphonic acid** (Weinberg), 1888, A., 285; (Feer and Müller), 1889, A., 258.

1:4-Amidoethoxynaphthalene (Grandmougin and Michel), 1892, A., 862; (Heermann), 1892, A., 1097.

derivatives of (Heermann), 1892, A., 1097.

β-**Amidoethoxynaphthalene** (Gaess), 1891, A., 459.

*di***Amidoethoxynaphthylphenyl** (Weinberg), 1888, A., 286.

*di***Amidoethoxyphenyltolylsulphonic acid** (Weinberg), 1888, A., 286.

4-Amido-1-ethoxyquinoline (Vis), 1892, A., 1105.

o-**Amidoethylaniline.** See Ethylphenylenediamine.

Amidoethylbenzenes, derivatives of (Paucksch), 1884, A., 1142; 1885, A., 255.

o-**Amidoethylbenzenesulphonic acid** (Paucksch), 1885, A., 256.

ω-**Amidoethylbromopiperonylcarboxylic anhydride** (Perkin), 1890, T., 1017.

Amidoethylic acetate (Gabriel and Heymann), 1890, A., 1268.

Amidoethylic alcohol. See Hydroxyethylamine.

Amidoethylic benzoate, salts of (Gabriel and Heymann), 1890, A., 1267.

m-**Amidoethylic cumate** (Abenius), 1888, A., 854.

Amidoethylindene (v. Miller and Rohde), 1889, A., 984.

1-Amidoethylpiperidine (Gabriel), 1891, A., 817.

ω-**Amidoethylpiperonylcarboxylic acid,** preparation of (Perkin), 1890, T., 1053.

action of heat, of methylic iodide, and of nitrous acid on (Perkin), 1890, T., 1058.

salts of, with acids (Perkin), 1890, T., 1056.

anhydride of (Perkin), 1890, T., 993, 1013.

*di***Amidoethylsulphone** (Gabriel), 1892, A., 131.

p-**Amidoethyl-*o*-toluidine.** See Methylethylphenylenediamine.

Amidoethylxylenes (Töhl and Geyger), 1892, A., 969.

p-**Amidofluorene** (Strasburger), 1884, A., 329, 754.

Amidofumaric acid, diamide of (Perkin), 1888, T., 703.

Amidogen (NH_2), alleged existence of (Combes), 1883, A., 14.

substitution of, by means of sodamide (Walter), 1886, A., 1004.

Amidoglycocine (Curtius), 1891, A., 56.

Amido-group, displacement of the, by the acetyl-group by aid of the diazo-reaction (Meldola), 1888, A., 487.

displacement of the, by the cyanic acid residue and by halogens, cyanogen and thiocyanogen (Gattermann, Haussknecht, Cantzler and Ehrhardt), 1890, A., 971.

displacement of the, in aromatic amines by the halogens (Losanitsch), 1885, A., 521.

Amido-group, displacement of the, in aromatic derivatives by chlorine, bromine and cyanogen (Sandmeyer), 1884, A., 1311; 1885, A., 149.
  displacement of the, in aromatic compounds by hydrothionyl and oxysulphuryl (Klason), 1887, A., 478.
  displacement of the, by the sulphonic acid group (Landsberg), 1890, A., 1137.
  displacement of cyanogen by the (Ahrens), 1888, A., 266.
  displacement of halogens by the (Seelig), 1891, A., 36.
  displacement of the nitro-group in aromatic compounds by the (Sandmeyer), 1887, A., 720.
  best method of elimination of (Friedländer), 1889, A., 606.
  reagent for (Hinsberg), 1891, A., 49.
Amido-groups in organic bases, method of determining the number of (Meldola and Hawkins), 1892, P., 133.
*di***Amidoguaiacol** (Herzig), 1883, A., 464.
Amidoguanidine and its derivatives (Thiele), 1892, A., 1295.
Amidohemipinic acid, sodium salt of (Grüne), 1887, A., 49.
o-**Amidohemipinic anhydride** (Liebermann), 1886, A., 468; 1887, A., 257; (Grüne), 1887, A., 48.
o-**Amidohemipinphenylhydrazide** (Liebermann), 1887, A., 45.
Amidoheptamethylene (Markownikoff), 1890, A., 729.
Amidoheptylbenzene (Auger), 1887, A., 816.
p-*di***Amidohexamethylene** (v. Baeyer and Noyes), 1889, A., 1147.
*di***Amidohexane** and its derivatives (Tafel), 1889, A., 976; (Tafel and Neugebauer), 1890, A., 1000.
α-**amidohexocyanidine** and *α*-**amidohexocyanine** (Duvillier), 1887, A., 850.
α-**Amidohexoic acid.** See Leucine.
*di***Amidohydracridine ketone** and its derivatives (Jourdan), 1885, A., 988.
o-**Amidohydrazinebenzene**-*p*-**sulphonic acid.** See Amidophenylhydrazinesulphonic acid.
Amidohydrocarbostyril (Fischer and Kuzel), 1884, A., 441.
*di***Amidohydrocinnamic acid.** See *di*Amido-*β*-phenylpropionic acid.
Amidohydrothiocinnamic acid (Bondzyński), 1887, A., 1109.
Amidohydroxyanthraquinone ethylate (Liebermann and Hagen), 1883, A., 73.
Amido-*o*-hydroxybenzoic acid. See Amidosalicylic acid.
4-**Amido-*m*-hydroxybenzoic acid** (Limpricht), 1891, A., 1037.
β-**Amido-*α*-hydroxybutyric acid** (Melikoff), 1884, A., 1301.
Amidohydroxy*iso*butyric acid (Melikoff), 1885, A., 650.
Amidohydroxycamphor (Kachler and Spitzer), 1883, A., 1008.
*di***Amidohydroxydiphenyl** (Weinberg), 1888, A., 285.
p-**Amido-*m*-hydroxydiphenylamine** (Kohler), 1888, A., 587.
4-**Amido-4′-hydroxydiphenyl-2:2′-disulphonic acid** (Limpricht), 1891, A., 929.
4:4′-*di***Amido-3-hydroxydiphenyl-6-sulphonic acid** (Weinberg), 1888, A., 285.
2-**Amido-2′-hydroxy-5:5′-ditolyl-4:4′-disulphonic acid** (Helle), 1892, A., 1468.
4-**Amido-1-hydroxy-3-methoxybenzene** (Bechhold), 1889, A., 1155.
2-**Amido-2′-hydroxy-3′-methylhydroquinoline** (Edeleanu), 1888, T., 560; P., 55.
2-**Amido-1-hydroxy-4-methylquinoline** (Ganelin and v. Kostanecki), 1892, A., 506.
4-**Amido-1-hydroxy-2-naphthoic acid** (Nietzki and Guitermann), 1887, A., 732; (Schmitt and Burkard), 1888, A., 59.
*di***Amidohydroxynaphthylphenyl derivatives** (Meldola and Morgan), 1889, T., 124, 125.
Amidohydroxyoxindole chloride (Jackson and Bentley), 1892, A., 1219.
*tetra***Amidohydroxypentene** (Nietzki and Rosemann), 1889, A., 770.
*di***Amido-4-hydroxy-2-phenyl-6-methyl-*m*-diazine** (Pinner), 1887, A., 1054.
p-**Amido-3-hydroxy-2′-phenylquinoline** (Weidel and v. Georgievics), 1888, A., 967.
*di***Amidohydroxyphenyltolyl** (Weinberg), 1888, A., 285.
4:4′-*di***Amido-3-hydroxyphenyltolylsulphonic acid** (Weinberg), 1888, A., 285.
Amidohydroxypropylbenzoic acid, action of nitrous acid, and of ethylic chloroformate on (Widman), 1884, A., 1022.
o-**Amido-*p*-hydroxy*iso*propylbenzoic acid** (Widman), 1886, A., 466.
m-**Amido-*p*-hydroxy*iso*propylbenzoic acid** (Widman), 1884, A., 317.

- **Amido-*exo*-hydroxy*iso*propylbenzoic** acid, action of acetic anhydride on (Widman), 1884, A., 302.
- **Amidohydroxypyridine** and its derivatives (Krippendorff), 1885, A., 1243.
- **1-Amido-3-hydroxyquinoline** (Mathëus), 1888, A., 852; (Altschul), 1888, A., 1108.
- **Amido-2′-hydroxyquinoline.** See Amidocarbostyril.
- **3′-Amidohydroxyquinoline** and the action of its diazo-salts on phenols and tertiary bases (Riemerschmied), 1883, A., 1148.
- **Amidohydroxythymoquinoneimide** (Anschütz and Leather), 1886, T., 725.
- **Amido-*o*- and *m*-hydroxytoluic acid** (Nietzki and Ruppert), 1891, A., 308.
- ***di*Amido*di*imidobenzene nitrate** (Nietzki), 1887, A., 930.
- **Amidoindazine** (Witt, Nölting, and Gramdmougin), 1891, A., 312.
- **Amidoisethionic acid.** See Taurine.
- **Amidolepidine.** See Amido-4′-methylquinoline.
- ***di*Amidomalonamide** (Conrad and Brückner), 1892, A., 40.
- **Amidomercaptan** (Gabriel), 1889, A., 870.
  - hydrochloride (Gabriel), 1891, A., 815.
- **Amidomesitylene.** See Mesidine.
- **Amidomethamido*per*chloromethylcyamidine** (Weddige), 1886, A., 324.
- ***m*-Amido-*o*-methoxycinnamic acid** (Schnell), 1887, A., 140.
- **2-Amido-3-methoxy-2′-phenylhydroquinoline** (v. Miller and Kinkelin), 1887, A., 978.
- ***m*-Amido-*p*-methoxytoluene** (Limpach), 1889. A., 499.
- ***di*Amidomethoxytriphenylmethane** (Mazzara and Possetto), 1885, A., 1141.
- **Amidomethylanthranol** and its acetyl derivative (Roemer), 1883, A., 1137.
- **Amidomethylanthraquinone** (Roemer; Roemer and Link), 1883, A., 1137, 1138.
- **Amidomethylcarbostyril** (Feer and Koenigs), 1885, A., 1235.
- **4-Amido-5-methyl-2:6-diethyl-*m*-diazine** (v. Meyer), 1889, A., 577; (Schwarze), 1890, A., 1159.
- **Amidomethyldihydroanthracene** (Roemer), 1883, A., 1137.
- ***m*-*di*Amido-*p*-methylethylbenzene** (Errera and Baldracco), 1892, A., 606.
- **Amido-*p*-methylhexadecylbenzene** (Krafft and Göttig), 1891, A., 130.
- **Amidomethylethyl*iso*-oxazole** (Hanriot), 1892, A., 79.
- **Amidomethylethyl*iso*propyl-*m*-diazine** (v. Meyer), 1889, A., 578.
- **Amido-2′-methylindole** (Wagner), 1888, A., 284.
- **Amidomethylnaphthaquinoxaline** (Witt), 1886, T., 400.
- ***o*-Amido-2′-methyloctohydro-β-naphthaquinoline** (Bamberger and Strasser), 1891, A., 1514.
- **4-Amido-1-methylquinoline** [m.p. 143°] (Nölting and Trautmann), 1891, A., 327; 1892, A., 728.
- **Amido-3-methylquinoline** [m.p. 132°] (Fourneaux), 1885, A., 400.
- **1-Amido-3-methylquinoline** [m.p. 62°] (Nölting and Trautmann), 1891, A., 327; 1892, A., 728.
- **4-Amido-3-methylquinoline** [m.p. 145°] (Nölting and Trautmann), 1891, A., 325; 1892, A., 727.
- **2-Amido-2′-methylquinoline** (Gerdeissen), 1889, A., 520.
  - derivatives of (Doebner and Miller), 1884, A., 1373.
- **3′-Amido- and *di*amido-2′-methylquinoline** (Conrad and Limpach), 1888, A., 1111.
- **2′-Amido-4′-methylquinoline** (Klotz), 1888, A., 1113; (Ephraim), 1892, A., 1488.
- **3-Amido-4′-methylquinoline** (Busch and Koenigs), 1890, A., 1437.
- **Amidomethylselenazole** (Hofmann), 1889, A., 726.
- **3-Amido-1-methyltetrahydroquinoline** (Bamberger and Wulz), 1891, A., 1254.
- **1-Amido-3-methyltetrahydroquinoline** (Bamberger and Wulz), 1891, A., 1255.
- ***meso*Amidomethylthiazole.** See Thiocyanopropimine.
- ***o*-Amidomethyl-*p*-toluidine.** See Methyltolylenediamine.
- **Amido-β-methylumbelliferone** (v. Pechmann and Cohen), 1884, A., 1332.
- **Amidomethyluracil** (Behrend), 1886, A., 338.
- **Amidomyristic acid** (Hell and Twerdomedoff), 1889, A., 956.
- **Amidonaphthalene.** See Naphthylamine.
- ***di*Amidonaphthalene.** See Naphthylenediamine.
- **Amidonaphthalenesulphonic acids.** See Naphthylaminesulphonic acids.
- **Amido-β-naphthaphenanthrazine** (Loewe), 1890, A., 1424.

Amidonaphthaphenazine (Zaertling), 1890, A., 509.

α-**Amido-*α*-naphthaphenazine** (Fischer and Hepp), 1890, A., 801; (Kehrmann), 1890, A., 1266.

Amido-*β*-naphthaquinol and its hydrochloride (Groves), 1884, T., 300.

Amidonaphthaquinone (Meerson), 1888, A., 1200.

Amidonaphthaquinoneimide (Kronfeld), 1884, A., 1037.

*di***Amidonaphtharesorcinol hydrochloride** (Kehrmann and Weichardt), 1889, A., 1198.

Amidonaphthastyril (Ekstrand), 1887, A., 373.

Amido-*α*-naphthoic acid derivatives (Ekstrand), 1889, A., 152.

Amido-*β*-naphthoic acid (Ekstrand), 1891, A., 932.

*di***Amido-*β*-naphthoic acids** (Ekstrand), 1891, A., 78, 79.

Amido-*α*-naphthol [2:1] (Grandmougin and Michel), 1892, A., 861.

Amido-*α*-naphthol [1:4] (Grandmougin and Michel), 1892, A., 861.
  sulphonic acid from (Seidel), 1892, A., 721.

*di***Amido-*α*-naphthol**, action of bromine on (Zincke and Gerland), 1887, A., 838; (Zincke), 1888, A., 290.
  derivatives of (Meerson), 1888, A., 713.

Amido-*β*-naphthol [1:2] (Grandmougin and Michel), 1892, A., 862.
  identification of (Meldola and Morgan), 1889, T., 120.

Amido-*β*-naphthol [1:2] and its hydrochloride, preparation of, from nitroso-*β*-naphthol (Groves), 1884, T., 293.

Amido-*β*-naphthol [1′:2 and 4′:2] (Friedländer and Szymanski), 1892, A., 1233.

*di***Amido-*β*-naphthol hydrochloride** (Loewe), 1890, A., 1424.

Amido-*β*-naphthol sulphate (Groves), 1884, T., 297.

Amido-*α*-naphthol-3:1′-disulphonic acid (Bernthsen), 1891, A., 215.

Amido-*β*-naphthol -1′:3′- and -3:3′-disulphonic acids (Witt), 1889, A., 273.

α-**Amido-*α*-naphtholsulphonic acid** [4:1:2] (Seidel), 1892, A., 721.

β-**Amido-*α*-** and *α*-**Amido-*β*-naphtholsulphonic acids** (Schmidt), 1892, A., 476.

α-**Amido-*β*-naphthol-*α*-sulphonic acid** [1:2:1′], [*α*-acid] (Witt), 1889, A., 271.

Amido-*β*-naphthol-*β*-sulphonic acid [1:2:3′], [*β*-acid] (Witt), 1889, A., 272.

Amido-*β*-naphthol-*α*-sulphonic acid, [1:2:4′], [*γ*-acid] (Witt), 1889, A., 272.

Amido-*β*-naphthol-*β*-sulphonic acid, [1:2:2′], [*δ*-acid] (Witt), 1889, A., 272.

*di***Amido-*β*-naphthol-*α*-sulphonic acid** (Nietzki and Zübelen), 1889, A., 515.

Amido-*α*- and **-*β*-naphtholsulphonic acids** [4:1:2 and 2:1:4′] (Reverdin and De la Harpe), 1892, A., 996.

Amido-*α*- and -*β*-naphthyl mercaptans (Hofmann), 1887, A., 839.

m-**Amido-*p*-*α*-naphthylamidobenzoic acid** (Heidensleben), 1891, A., 307.

Amido-*β*-naphthylamine hydrochlorides (Loewe), 1890, A., 1424.

Amido-*β*-naphthylphenylamine. See Phenylnaphthylenediamine.

*di***Amido-*β*-naphthylphenylamine** (Ernst), 1891, A., 301.

Amidonaphthylphenylcarbamide (Goldschmidt and Rosell), 1890, A., 616.

Amidonitro-. See Nitramido-.

Amidononaphthene (Konowaloff), 1892, A., 443.

ar-*p*-**Amido-octohydro-*α*-naphthaquinoline** (Bamberger and Stettenheimer), 1891, A., 1261.

o-**Amido-octylbenzene hydrochloride** (Ahrens), 1887, A., 134.

p-**Amido-octylbenzene** and its derivatives (Beran), 1885, A., 523.

Amido-octyltoluene and its derivatives (Beran), 1885, A., 523.

Amido-opianylphenylhydrazide (Liebermann), 1887, A., 45.

Amido-oxalacetic acid phenylhydrazone (Tafel), 1887, A., 467.

Amido-oxalamidobenzoic acid. See Amidocarboxyphenyloxamic acid.

o-**Amido-oxalyl-*α*-naphthyl mercaptan** (Lang), 1892, A., 1079.

*di***Amido-oxalyl-*α*- and -*β*-naphthyl mercaptans** (v. Hofmann), 1887, A., 840.

o-**Amido-oxalylphenyl mercaptan** (Lang), 1892, A., 1079.

Amido*iso*oxazole (Hanriot), 1891, A., 1108.

"**Amido-oxyquinizinecarboxylic acid**" (Tafel), 1887, A., 468.

Amido-2′-oxyquinoline. See Amidocarbostyril.

α-**Amidopalmitic acid** (Hell and Iordanoff), 1891, A., 820.

Amidoparaldimine (Curtius and Jay), 1890, A., 735.

Amidoperezone (Anschütz and Leather), 1886, T., 720.

Amidophenaceturic acid (Hotter), 1888, A., 1299.

p-**Amido-** and *di***amido-phenanthraquinol hydrochlorides** (Anschütz and Meyer), 1885, A., 1068.
*α-di***Amidophenanthraquinol** and its derivatives (Kleemann and Wense), 1885, A., 1240.
*α-di***Amidophenanthraquinone** (Kleemann and Wense), 1885, A., 1240.
Amidophenazine (Barbier and Vignon), 1888, A., 688; (Fischer and Hepp), 1889, A., 500.
1:4-*di***Amidophenazine** (Fischer and Hepp), 1889, A., 500.
2:2′-*di***Amidophenazine** (Nietzki and Ernst), 1890, A., 1114.
m-**Amido-2-phenethylpiperidine** (Schuftan), 1890, A., 1438.
o- **Amidophenetoil**, action of chloracetic acid on (Vater), 1884, A., 1144.
  action of cyanogen chloride on (Berlinerblau), 1885, A., 147.
m-**Amidophenetoil** and its derivatives Wagner), 1885, A., 1212.
  hydrobromide (Staedel), 1883, A., 578.
p-**Amidophenetoil**, action of cyanogen chloride on (Berlinerblau), 1885, A., 147.
  oxidation products of (Kinzel), 1892, A., 158.
*tetra***Amidophenetoil hydrochloride** (Köhler), 1884, A., 1161.
Amidophenetoiltrimethylammonium iodide (Seidel), 1891, A., 53.
Amidophenols. See Phenol.
Amidophenolsulphonic acids and their relationship to Liebermann's colouring matters (Brunner and Kraemer), 1884, A., 1354.
  action of bleaching powder on (Hirsch), 1887, A., 834.
Amidophenophenanthrazine (Heim), 1888, A., 1097.
Amidophenyl amidotolyl ketone (Liebermann), 1888, A., 1097.
Amidophenyl ethyl ether, *mono-*, *di-*, and *tri-* (Lindner), 1885, A., 775.
Amidophenyl ethylene ethers, *o-*, *m-*, and *p-*, preparation, properties and salts of (Wagner), 1884, A., 433.
o-**Amidophenyl mercaptan** and its derivatives (v. Hofmann), 1887, A., 823, 1039.
  formation of anhydro-compounds of, from thioanilides (Jacobson), 1886, A., 700.
Amidophenylacetamide (Purgotti), 1891, A., 562.
Amidophenylacetic anhydride (Kossel), 1892, A., 468.
m-**Amidophenylacetonitrile** (Friedländer), 1884, A., 737; (Salkowski), 1884, A., 1176.
p-**Amidophenylacetonitrile** and its salts (Friedländer and Mahly), 1883, A., 919; (Friedländer), 1884, A., 737.
Amidophenylacridine. See Anilidoacridine.
*di***Amidophenylacridine.** See Chrysaniline.
m-**Amidophenyl***di-p*-**amidotolylmethane** (Bischler), 1889, A., 133.
Amidophenylazimidobenzene (Willgerodt), 1892, A., 1322.
Amidophenylbenzoglycocyamine and its hydrochlorides (Griess), 1883, A., 669.
o-**Amidophenylbenzylhydrazine** (Paal and Bodewig), 1892, A., 1455.
Amidophenylbiazolone (Freund and Kuh), 1890, A., 1441.
Amidophenylbismethyltetrahydroquinolylmethane (v. Miller and Plöchl), 1891, A., 1102.
Amidophenylcarbizinecarboxylic acid (Freund and Kuh), 1890, A., 1441.
m-**Amidophenylcrotonaldehyde** (v. Miller and Kinkelin), 1886, A., 701.
6-Amido-5-phenyl-2:4-dibenzyl-*m*-diazine (Wache), 1889, A., 684.
Amidophenylenecarbamide (Jentzsch), 1889, A., 46.
o-**Amidophenylethylhydrazine** (Hempel), 1890, A., 612.
α-p-**Amidophenylfurfuracrylonitrile** (Freund and Immerwahr), 1890, A., 1408.
o-**Amidophenylglyoxylic acid.** See Isatic acid.
o-**Amidophenylglyoxylic lactim.** See Isatin.
o-**Amidophenylhydrazine** (Bischler), 1889, A., 501.
m-**Amidophenylhydrazine** and its hydrochloride (Griess), 1885, A., 789.
5-Amidophenylhydrazine-*o*-sulphonic acid (Limpricht), 1885, A., 1216.
o-**Amidophenylhydrazine-*p*-sulphonic acid** (Nietzki and Lerch), 1889, A., 144; (Lerch), 1889, A., 881.
m-**Amidophenylhydroquinoline** (v. Miller and Kinkelin), 1885, A., 1145.
o-**Amidophenylic diphenylcarbamate** (Lellmann and Bonhöffer), 1887, A., 936.
Amidophenylic diphenylcarbamates (Lellmann and Benz), 1891, A., 1215.
o-**Amidophenylic disulphide** (v. Hofmann), 1887, A., 823.

p-**Amidophenylic ethylxanthate** (Leuckart), 1890, A., 604.
o-**Amidophenylic methylic sulphide** (v. Hofmann), 1887, A., 823.
Amidophenylic phenylmethylcarbamates (Lellmann and Benz), 1891, A., 1215.
***di*Amidophenylic thiocyanate** (Austen), 1889, A., 700.
Amido-2′-phenylindole (Fischer and Schmidt), 1888, A., 698.
Amidophenylinduline (Fischer and Hepp), 1891, A., 1046.
  action of sulphuric acid on (Fischer and Hepp), 1892, A., 341.
p-**Amidophenyllactic acid** (Erlenmeyer and Lipp), 1883, A., 994.
m-**Amidophenyllutidine** (Lepetit), 1887, A., 1053.
m-**Amidophenyllutidinedicarboxylic acid** (Lepetit), 1887, A., 1053.
Amido- and *di*amido-2-phenyl-6-methyl-*m*-diazine (Pinner), 1887, A., 1054.
o-**Amidophenylmethylhydrazine** (Hempel), 1890, A., 613.
m-**Amido-2′-phenyl-3′-methylhydroquinoline** (v. Miller and Kinkelin), 1886, A., 561.
m-***di*Amido-*p*-phenyl-α-methylpropionic acid** (Errera and Baldracco), 1892, A., 606.
Amidophenyl-2′-methylquinoline (Schiff and Vanni), 1890, A., 1298.
m-**Amido-2′-phenyl-3′-methylquinoline** (v. Miller and Kinkelin), 1886, A., 560, 561.
p-**Amido-2′-phenyl-2-methylquinoline** (*ψ-flavaniline*) (Weidel and Bamberger), 1888, A., 966.
4-**Amido-2′-phenyl-3′-methylquinoline.** See Flavaniline.
Amidophenylmercaptomethyl mercaptan (Jacobson and Frankenbacher), 1891, A., 1048.
***di*Amidophenyl-β-naphthol** (Ernst), 1891, A., 301.
Amido-*n*-phenylosotriazolecarboxylic acid (Baltzer and v. Pechmann), 1891, A., 1117.
1-**Amidophenylpiperidine** (Lellmann and Just), 1891, A., 1245.
3-**Amidophenylpiperidine,** formation of dyes from (Lellmann and Geller), 1888, A., 1108.
o-**Amidophenylpropiolic acid** and its derivatives (v. Baeyer and Bloem), 1883, A., 196.
***di*Amidophenylpropionic acid** (Gabriel), 1883, A., 195.
o-**Amido-α-phenylpropionic anhydride** See Atroxindole.
α-**Amidophenylpropionitrile** (Erlenmeyer and Lipp), 1883, A., 992.
Amidophenylquinoline [m.p. 136°·5] (Jellinek), 1886, A., 1045.
Amido-3-phenylquinoline (Weidel and v. Georgievics), 1888, A., 967.
2-**Amido-2′-phenylquinoline** (v. Miller and Kinkelin), 1885, A., 1144.
Amidophenyl*iso*quinoline (Gabriel), 1886, A., 631.
Amidophenylrosinduline (Fischer and Hepp), 1890, A., 765.
Amidophenyltetrazolecarboxylic acid (Bladin), 1892, A., 1009.
***tri*Amidophenyltoluidine** (Ernst), 1891, A., 300.
o-**Amidophenyl-*p*-[-*p*-]-tolylamine** (Heidensleben), 1891, A., 307.
p-**Amidophenyl-*p*-tolylamine.** See Tolylphenylenediamine.
***di*Amidophenyltolylmethanes** (Ullmann), 1888, A., 288.
Amidophenyltriazolecarboxylic acid (Bladin), 1892, A., 735.
o-**Amidophenyltrimethylmethane** (Senkowski), 1890, A., 1296.
p-**Amidophenyltrimethylmethane** (Senkowski), 1890, A., 1296; 1892, A., 44.
p-**Amidophenylurethane** and its derivatives (Hager), 1885, A., 149.
o-**Amidophenylvaleric acid,** derivatives of (Diehl and Einhorn), 1887, A., 485.
Amidophthalamide (Pellizzari), 1886, A., 1025.
Amidophthalic acid, salts of (Landsberg), 1883, A., 476.
as-**Amido*iso*phthalic acid** (Loewenherz), 1892, A., 1464.
***di*Amido*iso*phthalic acid** (Claus and Wyndham), 1889, A., 143.
Amidophthalide [m.p. 167°] (Racine), 1887, A., 951.
  [m.p. 178°] (Hönig), 1886, A., 242.
Amidopiaselenole (Hinsberg), 1890, A., 161.
o-**Amidopiperonaloxime** (Haber), 1891, A., 706.
Amidopiperonylacrylic acid (Perkin), 1891, T., 158.
γ-**Amidopropanesulphonic acid** (Lauer), 1890, A., 1090.
2:4:1-**Amidopropenylbenzoic acid** (Widman), 1886, A., 466.
3:4:1-**Amidopropenylbenzoic acid** and its derivatives (Widman), 1884, A., 317.
  action of nitrous acid on (Widman), 1884, A., 1022.

Amidopropionic acid. See Alanine.
Amidopropiophenone hydrochloride (Schmidt), 1890, A., 372.
o-**Amido-*p*-propylcinnamic acid** (Widman), 1886, A., 464.
Amidopropylene (Hirsch), 1890, A., 860.
Amido*iso*propylic alcohol. See Hydroxypropylamine.
γ-**Amidopropylic benzoate** (Gabriel and Elfeldt), 1892, A., 213.
β-**Amidopropylic benzoate hydrobromide** (Gabriel and Heymann), 1890, A., 1268.
γ-**Amidopropylic hydrogen sulphate** (Gabriel and Lauer), 1890, A., 473.
Amido*iso*propylindene (v. Miller and Rohde), 1889, A., 984.
γ-**Amidopropyl hydrogen sulphate** (Lauer), 1890, A., 1090.
Amidopurpurin (Brasch), 1891, A., 1078.
*di***Amidopyrene** (Jahoda), 1888, A., 161.
Amidopyridine-3:4-dicarboxylic acid (Goldschmiedt and Strache), 1889, A., 1016.
*di***Amidoquinol** (Nietzki and Schmidt), 1889, A., 968.
  hydrochloride, and its derivatives (Nietzki and Preusser), 1886, A., 1024.
  diethyl ether (Nietzki and Rechberg), 1890, A., 967.
*tri***Amidoquinol sulphate** (Nietzki and Schmidt), 1889, A., 968.
2-**Amidoquinoline** (Freydl), 1888, A., 296.
4-**Amidoquinoline** (Dufton), 1892, T., 785.
2′-**Amidoquinoline,** preparation of (Ephraim), 1891, A., 1509.
3′-**Amidoquinoline** (Riemerschmied), 1883, A., 1148.
4′-**Amidoquinoline** (Hoogewerff and van Dorp), 1892, A., 725.
*di***Amidoquinolines,** α- and β- (Claus and Kramer), 1885, A., 908.
Amidoquinones (Kehrmann), 1890, A., 756, 1265.
Amidoquinoneimide (Meldola), 1884, T., 161.
p-**Amidoquinoxaline** and its salts (Hinsberg), 1886, A., 722.
Amidoresorcinol (Fèvre), 1883, A., 733.
*di***Amidoresorcinol hydrochloride** (Typke), 1883, A., 917.
Amidoresorcinoldisulphonic acid (Ulzer), 1889, A., 510.
Amidoresorcinolsulphonic acid, α- and υ- (Brunner and Kraemer), 1884, A., 1354, 1355.
p-**Amidoresorcinyl dimethyl ether,** and its derivatives (Bechhold), 1889, A., 1155.
4-**Amidosalicylic acid,** action of aniline on (Limpricht and v. Rechenberg), 1890, A., 158.
5-**Amidosalicylic acid,** action of benzoic chloride on (Dabney), 1884, A., 308.
Amidostearic acid [m. p. 63°] (Gautier and Etard), 1884, A., 89.
α-**Amidostearic acid** [m. p. 221°] (Hell and Sadomsky), 1891, A., 1336.
o-*di***Amidostilbene,** azo-dyes from (Bischoff), 1888, A., 1094.
p-*di***Amidostilbene** (Bender and Schultz), 1887, A., 268.
*di***Amidostilbene sulphide** (Anschütz and Schultz), 1889, A., 602.
*di***Amidostilbenesulphonic acid** (Bender and Schultz), 1887, A., 268.
Amidostrychnine (Loebisch and Schoop), 1886, A., 268.
*di***Amidostrychnine** (Hanriot), 1883, A., 670.
p-**Amidostyrene** (Bernthsen and Bender), 1883, A., 70.
m-**Amidostyryl methyl ketone** (v. Miller and Rohde), 1890, A., 1138.
o-**Amidostyrylacrylic acid** (Diehl and Einhorn), 1885, A., 1222, 1223.
o-**Amidostyrylpropionic acid** (Diehl and Einhorn), 1887, A., 485.
m-**Amido-2-styrylpyridine** (Schuftan), 1890, A., 1438.
Amidosuccinic acid. See Aspartic acid.
*di***Amidosuccinic acid** (Claus), 1883, A., 43.
Amidosulphime dithiocarbamidosulphinites (Tiemann), 1891, A., 557.
p-**Amido-*o*-sulphobenzoic acid** (Hedrick), 1888, A., 280.
p-**Amido-*m*-sulphobenzoic acid** (Fischer), 1892, A., 332.
Amidosulphonic acids (Pellizzari and Matteucci), 1888, A., 1302; (Krafft and Bourgeois), 1892, A., 700.
  action of aldehydes on (Cahn and Lange), 1887, A., 962.
Amidosulphonic acids, aromatic, acetyl derivatives of (Nietzki and Benckiser), 1884, A., 1024.
Amidoterebenthene (Pesci and Bettelli), 1887, A., 272; (Pesci), 1891, A., 1086.
p-**Amidotetrahydro-α-naphthaquinoline** (Bamberger and Stettenheimer), 1891, A., 1259.
*di***Amidotetrahydronaphthylthiocarbamide** (Bamberger and Bammann), 1889, A., 783.

p-**Amidotetrahydroquinoline** (Ziegler), 1888, A., 609.
Amidotetrahydroxybenzene hydrochloride (Nietzki and Schmidt), 1889, A., 969.
*di***Amidotetrahydroxybenzene,** and its derivatives (Nietzki and Benckiser), 1885, A., 780.
Amidotetramethylbenzene (*isoduridine, tetramethylamidobenzene*) (Nölting and Baumann), 1885, A., 384, 893.
m-*di***Amidotetramethylbenzidine** (Lauth), 1892, A., 1222.
Amidotetrazotic acid (Thiele), 1892, A., 1299.
Amidotetrethyl*di***amidotriphenylmethane** (Fischer and Schmidt), 1884, A., 1316.
μ-**Amidothiazole-α-carboxylic acid** (Steude), 1891, A., 743.
μ-**Amidothiazoledicarboxylic acid** (Rubleff), 1891, A., 224.
Amidothiazoles, and their isomerides (Traumann), 1889, A., 414.
  from thiocarbamide and halogenated ketones and aldehydes (Hantzsch and Traumann), 1888, A., 573.
μ-**Amido-α-thiazylacetic acid** (Steude), 1891, A., 743.
Amidothienylacetic acid (Bradley), 1886, A., 1014.
o-**Amidothiobenzamide derivatives** (Stewart), 1892, A., 54.
Amido-*m*- and -*p*-**thiocyanocinnamic acids** (Rothschild), 1890, A., 1123; 1891, A., 199.
Amidothiodiphenylamine (Bernthsen), 1885, A., 259; 1886, A., 53.
*di***Amidothiodiphenylamine** (Bernthsen), 1885, A., 259; 1886, A., 53.
*di***Amidothiodiphenylmethylamine** and its derivatives (Bernthsen), 1885, A., 259.
Amidothionaphthol (Cleve), 1889, A., 155; (Ekbom), 1890, A., 995.
Amidothiophen hydrochloride, and its derivatives (Stadler), 1885, A., 1204.
*di***Amidothymoquinone** (Anschütz and Leather), 1886, T., 725.
*di***Amidotolazinedicarboxylic acid** (Kehrmann), 1889, A., 1154.
m-**Amido-***o*-**tolidine** (Loewenherz), 1892, A., 852.
3:4-*di*Amidotoluene. See Tolylene-*o*-diamine.
c-*tetra***Amidotoluene,** and its sulphate (Nietzki and Rösel), 1891, A., 192.
*penta***Amidotoluene** (Palmer), 1889, A., 390.
o-**Amidotoluene**-*p*-**azodimethylaniline** (Wallach), 1887, A., 41.
p-**Amidotoluene**-*o*-**azodimethylaniline** (Wallach), 1887, A., 41.
Amidotoluenesulphonic acids. See Toluidinesulphonic acid.
*di***Amidotoluenesulphonic acid** (Nietzki and Pollini), 1890, A., 502.
β-**Amido-***p*-**toluic acid** (Noyes), 1889, A., 394.
γ-**Amido-***o*-**toluic acid,** phosphate of (Hönig), 1886, A., 242.
ω-**Amido-***m*-**toluic acid** (Reinglass), 1891, A., 1345.
m-**Amido-***p*-**toluic acid** (*m-homoanthranilic acid*) (Niementowski), 1888, A., 837; 1889, A., 1065; (Niementowski and Rozański), 1888, A., 1088; (Fileti and Crosa), 1889, A., 495.
*di***Amido-***p*-**toluic acids,** 2:3-, 2:5-, and 3:5- (Claus and Joachim), 1892, A., 176.
o-**Amido-***p*-**toluonitrile** (Niementowski), 1888, A., 837; (Glock), 1888, A., 1291.
o-**Amido-***p*-**toluoylamide** (Niementowski), 1888, A., 837.
*di***Amido-***p*-**tolyl ketone** (Lange and Zufall), 1892, A., 1460.
m-**Amido-***o*-**tolylacrylic acid** (v. Miller and Rohde), 1890, A., 1140.
*m***Amido-***p*-(*o*) and -*p*-(*p*-)- **tolylamidobenzoic acid** (Heidensleben), 1891, A., 306.
Amido-*p*-**tolylazimidobenzene** (Willgerodt), 1892, A., 1322.
m-**Amidotolyl**-*p*-**azoacetoacetic acid** (Bamberger), 1885, A., 158.
2-Amidotolyl-4-oxamic acid (Schiff and Vanni), 1890, A., 1125; 1891, A., 833; 1892, A., 599, 601, 1208.
2-Amidotolyl-4-oxamide and **-oxanilide** (Schiff and Vanni), 1891, A., 834; 1892, A., 602.
Amidotolylurethane (Schiff and Vanni), 1892, A., 600; (Schiff), 1892, A., 1203.
p-**Amidotriazobenzene** (Griess), 1888, A., 826.
m-**Amidotriazobenzoic acid** (Griess), 1888, A., 826.
6-Amido-2:4:5-triethyl-*m*-**diazine** (Wache), 1889, A., 684.
Amidotriethylgallic acid (Schiffer), 1892, A., 716.
Amidotriethylpyrogallol (Schiffer), 1892, A., 716.
Amidotrihydroxynaphthalene (Kehrmann), 1888, A., 940.
Amidotrimethylbutyllactic acid (Weil), 1886, A., 1009.
Amidotrimethyluracil (Hagen), 1888, A., 582.

Amido- and *tri*amido-triphenylamine (Heydrich), 1885, A., 1213; (Herz), 1890, A., 1409.
***tri*Amidotriphenylarsine** (Philips), 1886, A., 618.
***tetra*Amidotriphenylbenzene** (Mellin), 1890, A., 1423.
***p*-Amidotriphenylcarbinol** (v. Baeyer and Löhr), 1890, A., 1141, 1142.
***tri*Amidotriphenylcarbinol.** See *p*-Rosaniline.
6 - Amido - 2:4:5 - triphenyl - *m* - diazine (Wache), 1889, A., 684.
Amidotriphenylethophenazonium hydroxide (Kehrmann and Messinger), 1892, A., 1109.
***o*-Amidotriphenylmethane** (Fischer and Fränkel), 1888, A., 56.
***p*-Amidotriphenylmethane** (v. Baeyer and Löhr), 1890, A., 1141.
***di*Amidotriphenylmethane**, preparation of (Mazzara), 1885, A., 904; (Ullmann), 1885, A., 1236.
  action of phenols on (Mazzara), 1885, A., 800.
  action of potassium nitrite on (Mazzara), 1885, A., 800, 904.
***tri*Amidotriphenylmethane.** See *p*-Leucaniline.
Amidotriphenylphosphine oxide (Michaelis and v. Soden), 1884, A., 1180.
Amidotruxillic acids (Homans, Steltzner and Sukow), 1891, A., 1496.
Amidouracilcarboxylic acid (Köhler), 1887, A., 128; (Behrend), 1887, A., 920.
δ - Amidovaleraldehyde (Wolffenstein), 1892, A., 1484.
γ-Amidovaleric acid (Tafel), 1886, A., 1008; 1887, A., 463; 1889, A., 961.
γ-Amidovaleric anhydride (Tafel), 1889, A., 961.
δ-Amidovaleric acid (Schotten), 1888, A., 1105.
  from the putrefaction of proteids (Gabriel and Aschan), 1891, A., 948.
  synthesis of (Gabriel), 1890, A., 1129.
β-Amido*iso*valeric acid (Bredt), 1883, A., 176.
Amidoximes (Tiemann and Krüger), 1884, A., 1325; (Tiemann), 1885, A., 895; 1890, A., 41, 140, 141, 253; 1891, A., 538, 697; 1892, A., 135, 317; (Hochheim), 1890, A., 1265.
  preparation of (Tiemann), 1886, A., 875.
  action of benzenesulphonic chloride on (Pinnow), 1892, A., 460.
Amidoximes, behaviour of, towards diazobenzene derivatives (Stieglitz), 1890, A., 254.
  cyanogen additive products of (Nordenskiöld), 1890, A., 1120.
  sulphur derivatives of (Tiemann), 1891, A., 557.
  substituted (Müller), 1890, A., 43.
  reactions of (Tiemann), 1885, A., 1216.
Amido-*p*-xylene. See *p*-Xylidine.
***di*Amidoxylene.** See Xylylenediamine.
***di*Amido-*m*-xylenesulphonic acid** and its salts (Limpricht), 1885, A., 1234.
Amido-*m*-xylenol and its hydrochloride (Pfaff), 1883, A., 918.
Amido-*p*-xylenol (Sutkowski), 1887, A., 668.
***di*Amido-*p*-xylidine** (Witt, Nölting and Forel), 1889, A., 604.
Amidulin (Brukner), 1884, A., 575.
Amine hydrochlorides, dissociation of, in solution (Muller), 1890, A., 684.
Amine salts, absence of rotatory power in (Le Bel), 1890, A., 228.
Amine vapours, dissociation of (Burch and Marsh), 1889, T., 656; P., 127.
Amine-ethylenediaminechloropurpureocobalt salts (Jörgensen), 1890, A., 954.
Amines, formation of, from amides (Baubigny), 1883, A., 175.
  formation of, from the amides of the fatty series (Seifert), 1885, A., 963.
  magnetic rotation of, and the refraction and dispersion of light by, correspondence between (Gladstone and Perkin), 1889, T., 751.
  action of oxymethylene on (Kolotoff), 1886, A., 138.
  action of picric chloride on, in presence of alkali (Turpin), 1891, T., 714; P., 123.
  action of silicon fluoride on (Comey and Jackson), 1888, A., 941.
  action of soda, lime, and magnesia on (Lunge), 1884, A., 776.
  action of zinc ethyl on (Gal), 1883, A., 653; 1884, A., 985.
  compounds of, with salts of the heavy metals (Lachowicz and Bandrowski), 1888, A., 1281.
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Amines, aromatic, preparation of (Malbot), 1888, A., 41.
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Amines, aromatic, conversion of phenols into (BUCH), 1885, A., 147.
  isomeric change in the synthesis of (SEŃKOWSKI), 1892, A., 44.
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  condensation of, with aromatic aldehydes (HANTZSCH), 1891, A., 50.
  action of *di*bromo-α-naphthol on (MELDOLA), 1883, A., 536; 1884, T., 156.
  action of carbonic anhydride on (DITTE), 1888, A., 49.
  action of *di*chloracetic acid on (MEYER), 1884, A., 47.
  action of ethyl*di*chloramine on (PIERSON and HEUMANN), 1883, A., 915.
  action of glyoxal on (HINSBERG), 1888, A., 372.
  action of lactic acid on (WALLACH and WÜSTER), 1883, A., 1096.
  action of nitrous acid (nascent) on (DENINGER), 1890, A., 38.
  action of perthiocyanic acid on (TURSINI), 1884, A., 1140.
  action of sodium hypobromite on (DENIGÈS), 1889, A., 139.
  action of trimethylenic chlorobromide on (PINKUS), 1892, A., 1491.
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*β-iso***Amylene** (*trimethylethylene*), action of chlorine on (KONDAKOFF), 1885, A., 736; 1886, A., 136.

*β-iso***Amylene** (*trimethylethylene*), action of nitric peroxide on (Miller), 1887, P., 109.
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o-**Azodibenzylamine** (Lellmann and Arnold), 1892, A., 316, 890.
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  o-amido-, oxidation of (Zincke), 1886, A., 236.
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o-**Azotoluene-*p*-disulphonamide** (Helle), 1892, A., 1468.
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o-**Azo-*o*-toluidine** (Green and Lawson), 1891, T., 1016.
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  - **Azoxybenzotoluidide** (Mixter), 1884, A., 666.
  - *p*-**Azoxybenzoylformic acid** (Engler and Zielke), 1889, A., 506.
  - *o*-**Azoxybenzylethylaniline** (Lellmann and Boye), 1890, A., 1116.
  - *p*-**Azoxy-*o*-*di*chlorostilbene** (Witt), 1892, A., 444.
  - **Azoxydiphenylamine** (Fischer and Wacker), 1888, A., 1286.
  - **Azo-*o*-xylene,** 1:2:3- (Nölting and Stricker), 1889, A., 135.
  - **Azo-*m*-xylene,** 1:3:4- (Nölting and Stricker), 1889, A., 136.
  - **Azo-*p*-xylene,** 1:4:2- (Samanoff), 1883, A., 780; (Nölting and Stricker), 1889, A., 136.
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  - **Azo-xylenes** and colouring matters derived therefrom (Nölting and Stricker), 1889, A., 135.
    - amido- (Nölting and Forel), 1886, A., 58.
  - **Azo-*m*-xylenedisulphonic acid** (1:3:4:6-) and its salts (Jacobsen and Ledderboge), 1883, A., 593.
  - **Azoxy-*p*-methoxytoluene** (Brasch and Freyss), 1891, A., 1231.
  - **Azoxymethylethyl*iso*oxazole** (Hanriot), 1892, A., 79.
  - **Azoxy-1-methylquinoline** (Nölting and Trautmann), 1891, A., 328.
  - **Azoxymethylquinolines** (Nölting and Trautmann), 1892, A., 727, 729.
  - *α*-**Azoxynaphthalene-*α*-sulphonic acid** and its salts (Alén), 1886, A., 555.
  - *α*-**Azoxy-*β*-naphthylamine** (Harden), 1890, A., 631.
  - *p*-**Azoxyphenetoil** (Kinzel), 1892, A., 159.
  - **Azoxyphenol ethers** (Gattermann and Ritschke), 1890, A., 1119.
  - *p*-**Azoxyphenol** (Fischer and Wacker), 1888, A., 1286.
  - **Azoxy-*o*-phenoxyacetic acid** (Thate), 1884, A., 1170.
  - **Azoxypropylbenzoic acid** (Widman), 1883, A., 330.
  - **Azoxy*iso*propylbenzoic acid** (Alexéeff), 1885, A., 390.
  - **Azoxyterephthalaldehydic acid** (Homolka and Löw), 1886, A., 701.
  - **Azoxyterephthalic acid** (Homolka and Löw), 1886, A., 702.
  - "**Azoxytoluene**" [Petrieff's] (Pospechoff), 1888, A., 826.
  - *o*-**Azoxytoluene** (Klinger and Pitschke), 1886, A., 53; (Guitermann), 1887, A., 932.
- Azo-compounds—
  - *m*-**Azoxytoluene** (v. Buchka and Schachtebeck), 1889, A., 701.
  - **Azoxytoluenes** (Janovsky), 1890, A., 140.
    - two isomeric (Janovsky and Reimann), 1889, A., 392.
    - *α*- and *β*-, and their bromo- and nitro-derivatives (Janovsky), 1889, A., 865.
  - *p*-**Azoxytoluenes,** isomerism of (Hantzsch and Werner), 1890, A., 350.
  - **Azoxytoluenesulphonic acid** (Janovsky and Reimann), 1889, A., 392.
  - **Azoxytoluidine** (Limpricht), 1885, A., 974.
  - *p*-**Azoxy-*o*-toluidine** (Green and Lawson), 1891, T., 1016.
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  - *o*-**Azoxy-*p*-toluonitrile** (Niementowski), 1889, A., 1005.
- *m*-**Benzamidoazophenol** (Schulze), 1889, A., 778.
- **Benzazimide** (Finger), 1888, A., 948.
- **Benzeneazo-.** See also Phenylazo- and Azobenzene.
- **Benzeneazoacetone.** See Pyruvaldehydephenylhydrazone.
- **Benzeneazoaniline,** preparation of (Witt and Thomas), 1883, T., 113; (Fischer), 1884, A., 1014.
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- **Benzeneazoaniline,** amido- (Mixter), 1889, A., 666; (Nietzki), 1884, A., 1016; (Janovsky), 1885, A., 1131.
  - *m*-nitro- (Meldola), 1884, T., 112.
- **Benzeneazoaniline mono-** and **di-sulphonic acids** (Griess), 1883, A., 181.

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- **Benzeneazobenzaldehyde** (Beyer and Claisen), 1888, A., 828.
- **Benzeneazobenzeneazo-*p*-cresol** (Nölting and Kohn), 1884, A., 901.
- **Benzeneazobenzeneazonaphthol,** nitro- (Meldola), 1884, T., 113.
- **Benzeneazobenzeneazophenylenediamine** (Griess), 1883, A., 1103.
- **Benzeneazobenzoic acid** (Mentha and Heumann), 1887, A., 248.
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- **Benzeneazobenzoylacetic acid,** and *o*-nitro- (Bamberger and Calman), 1886, A., 62.
- **Benzeneazobenzoylacetone** (Beyer and Claisen), 1888, A., 828.
- **Benzeneazobenzylidene-β-naphthylamine** (Goldschmidt and Rosell), 1890, A., 616.
- **Benzene-*o*-azobromobenzene** (Janovsky), 1886, A., 795; (Janovsky and Erb), 1886, A., 1024.
- **Benzene-*m*-azobromobenzene** (Janovsky and Erb), 1886, A., 1024; 1887, A., 478.
- **Benzene-*p*-azobromobenzene** (Janovsky and Erb), 1887, A., 478; (Janovsky), 1887, A., 663; (Nölting and Werner), 1891, A., 211.
- **Benzeneazo-bromonitrobenzene** and **-bromonitrosobenzene** (Willgerodt), 1888, A., 949.
- **Benzeneazo*di*bromobenzene,** *di*bromo- and **benzeneazo*tri*bromobenzene,** *tri*bromo-, *di*sulphochlorides (Rodatz), 1883, A., 479.
- **Benzeneazo-*p*-bromobenzene,** nitro- and nitroso-derivatives of (Willgerodt and Ellon), 1891, A., 1362.
- **Benzeneazocarvacrol** (Mazzara), 1885, A., 1132.
- **Benzeneazo-*p*-chlorobenzamide** (Limpricht), 1891, A., 1037.
- **Benzeneazochlorobenzene,** and its derivatives (Heumann and Mentha), 1886, A., 874; 1887, A., 247.
- **Benzeneazo-*o*-chlorobenzene,** *di*nitronitroso- (Willgerodt), 1891, A., 1043.
- **Benzeneazo-*m*-chlorobenzene,** nitro- and nitronitroso-derivatives of (Willgerodt and Mühe), 1892, A., 454.
- **Benzeneazo-*p*-chlorobenzene,** nitro- and nitronitroso-derivatives of (Willgerodt and Böhm), 1891, A., 905.

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- **Benzeneazo-chloronitrobenzene** and **-chloronitrosobenzene** (Willgerodt and Ferko), 1888, A., 830.
- **Benzeneazo-*m*-chlorodimethylaniline,** *m*-nitro- (Staedel and Bauer), 1886, A., 944.
- **β-Benzeneazo-α-chloronaphthalene** (Zincke and Kegel), 1889, A., 267.
- **Benzeneazo-*o*- and -*p*-cresetoils** (Nölting and Werner), 1891, A., 212.
- **Benzeneazo-*m*-cresol** (Nölting and Kohn), 1884, A., 902.
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- **Benzeneazo-*p*-cresol,** *m*- and *p*-chloro- (Goldschmidt and Pollak), 1892, A., 974, 975.
  - *o*-nitro- (Goldschmidt and Brubacher), 1891, A., 1210.
- **Benzeneazocresols,** reduction of (Liebermann and v. Kostanecki), 1884, A., 1146.
- **Benzeneazo-*p*-cresolsulphonic acid** (Nölting and Kohn), 1884, A., 901.
- **Benzeneazocumenol,** and its reduction (Liebermann and v. Kostanecki), 1884, A., 1147.
- **Benzeneazocyanacetophenone** (Haller), 1889, A., 873.
- **Benzeneazocyanocamphor** (Minguin), 1892, A., 1343.
- **Benzeneazo-2-2′-dianilidonaphthalene** (Clausius), 1890, A., 629.
- **Benzeneazodibenzoylmethane** (Beyer and Claisen), 1888, A., 828.
- **Benzeneazodibenzoylmethane-*p*-sulphonic acid,** sodium salt of (Beyer and Claisen), 1888, A., 828.
- **Benzeneazodihydroxynaphthalene,** 1:2:2′- (Clausius), 1890, A., 628.
- **Benzeneazodimethylaniline,** *m*-amido- (Wallach), 1887, A., 41.
  - *p*-amido- (Meldola), 1884, T., 107.
  - *tri*bromo- (Silberstein), 1883, A., 661.
  - *m*-chloro- (Staedel and Bauer), 1886, A., 944.
  - nitro-derivatives of (Nölting), 1888, A., 270.
  - *m*-nitro- (Meldola), 1884, T., 120; 1887, A., 152; (Staedel and Bauer), 1886, A., 944.
  - *p*-nitro- (Meldola), 1884, T., 107.
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- **Benzeneazodimethylanilinesulphonic acid** (Nölting), 1888, A., 271.
- **Benzeneazo-α-dinaphthylamine** (Fischer and Hepp), 1890, A., 912.
- **α-Benzeneazo-αβ-dinaphthylamine** (Matthes), 1890, A., 385, 993.
- **Benzeneazo-ββ-dinaphthylamine** (Matthes), 1890, A., 993.
- **Benzeneazodiphenyl** (Locher), 1888, A., 589.
- **Benzeneazodiphenylamine,** *m*-nitro- (Meldola), 1884, T., 118, 119.
  - *p*-nitro- and *p*-amido- (Meldola), 1883, T., 440.
  - *m*- and *p*-nitroso- (Meldola),1884, T., 118, 119.
- **Benzeneazodiphenylcarbamide**(Goldschmidt and Rosell), 1890, A., 616.
- **Benzeneazodiphenyldisulphonic acid** (Griess), 1888, A., 827.
- **Benzeneazodiphenylthiocarbamide** (Berju), 1884, A., 1149.
- *o*-**Benzeneazoethylresorcinol** (Pukall), 1887, A., 662.
- **Benzeneazo-*m*-hydroxybenzoic acid** (Limpricht), 1891, A., 1037.
- **Benzeneazohydroxybenzyl alcohol** (Tummeley), 1889, A., 780.
- *m*-**Benzeneazo-*o*-hydroxymethylquinoline** (Ganelin and v. Kostanecki), 1892, A., 506.
- **Benzeneazo-*o*- and -*p*-hydroxyquinolines** (Mathëus), 1888, A., 851.
- **Benzeneazo-*p*-hydroxyquinolinesulphonic acid** (Mathëus), 1888, A., 851.
- **Benzeneazoindoxyl** (v. Baeyer), 1884, A., 74.
- **Benzeneazoiodobenzene** (Nölting and Werner), 1891, A., 211.
  - iodo-, colour of (Ling), 1892, P., 198.
- **Benzeneazo-ketones** (v. Richter and Münzer), 1884, A., 1342.
- **Benzeneazomalonic acid** (Meyer), 1888, A., 369; 1891, A., 922.
- **Benzeneazomethane** (*azomethylphenyl*) (Tafel), 1885, A., 1061.
- **Benzeneazomethylaniline,** *p*-nitro- (Nölting), 1888, A., 273.
  - and its acetyl derivative (Berju), 1884, A., 1149.
- **Benzeneazo-*o*-methylcyanacetophenone** (Haller), 1889, A., 874.
- **1″-Benzeneazo-2″-methyl-*ar*-octohydro-β-naphthaquinoline** (Bamberger and Müller), 1891, A., 1512; (Bamberger and Strasser), 1891, A., 1513.

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- **2′-Benzeneazo-2″-methyl-*ar*-octohydro-β-naphthaquinoline** (Bamberger and Strasser), 1891, A., 1513.
- **Benzeneazo-α-naphthaleneazo-α- and -β-naphthols,** *m*-nitro- (Meldola), 1884, T., 114, 116.
- **Benzeneazo-α-naphthaleneazoresorcinol,** *m*-nitro- (Meldola), 1884, T., 116.
- **Benzeneazonaphthalenes,** nitro-, nitroso-, and nitronitroso-derivatives of (Willgerodt and Schultz), 1891, A., 572.
- **Benzeneazonaphtharesorcinol,** nitroso- (v. Kostanecki), 1890, A., 261.
- **Benzeneazo-α-naphthol,** action of *m*-diazobenzoic acid and of diazosulphanilic acid on (Nölting and Grandmougin), 1891, A., 1076.
  - identity of, with α-naphthaquinonehydrazide (Zincke and Bindewald), 1885, A., 391.
  - amido-, methyl and ethyl ethers of (Witt and Schmidt), 1892, A., 862.
- **Benzeneazo-β-naphthol,** action of carbon disulphide on (Jacobson), 1888, A., 487.
  - reduction of (Meldola and Morgan), 1889, T., 122; P., 12.
  - *m*-nitro-, acetyl derivative of (Meldola and East), 1888, T., 464.
- **Benzeneazo-α- and -β-naphthols** (Liebermann), 1884, A., 610; (Zincke andRathgen), 1887, A., 54.
  - *p*-nitro- and *p*-amido- (Meldola), 1885, T., 661, 662.
- **Benzeneazo-α-naphthol-*m*-carboxylic acid,** *o*- and *p*- (Nölting and Grandmougin), 1891, A., 1074.
- **Benzeneazo-β-naphtholdisulphonic acid,** oxidation of (Lauth), 1892, A., 48.
- **Benzeneazonaphtholsulphonic acid,** spectrum of (Hartley), 1887, T., 196.
- **Benzeneazo-α-naphthylamidoacetic acid** (Donner), 1892, A., 191.
  - *o*-, *m*-, and *p*-nitro- (Donner), 1892, A., 1100.
- **Benzeneazo-α-naphthylamine,**
  - *p*-amido- (Meldola), 1883, T., 432.
  - *m*-nitro- (Meldola), 1884, T., 114.
  - *p*-nitro- (Meldola), 1883, T., 430.
- **Benzeneazo-β-naphthylamine** and its derivatives (Lawson), 1885, A., 803; (Zincke and Lawson), 1888, A., 159.

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Benzeneazo-β-naphthylamine, action of aldehydes and of nitric acid on (Meldola and Hughes), 1891, T., 379.

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o-nitro- (Meldola and Hughes), 1891, T., 373.

m-nitro-, action of nitrous acid on (Meldola and East), 1888, T., 463.

p-nitro-, and its reduction (Meldola), 1883, T., 430.

formation of ψ-azimides from (Meldola and Hughes), 1891, T., 378.

Benzeneazo-β-naphthylamines, nitro-, constitutional formulæ of (Meldola), 1884, T., 118.

acetyl derivatives of (Meldola and Hughes), 1891, T., 375.

Benzeneazo-α-naphthyldimethylamine (Eicker), 1891, A., 470.

Benzeneazo-α-naphthylethylamine (Henriques), 1885, A., 168; (Fischer and Hepp), 1890, A., 911; (Eicker), 1891, A., 470.

Benzeneazo-β-naphthylethylamine (Henriques), 1885, A., 168.

Benzeneazo-α- and -β-naphthylic acetates, nitration of (Meldola and Morgan), 1889, T., 609.

Benzeneazo-β-naphthylic acetate (Meldola and East), 1888, T., 466; (Meldola and Morgan), 1889, T., 609.

reduction of (Meldola and Morgan), 1889, T., 117, 122; P., 12.

Benzeneazo-α-naphthylic benzoate (Meldola and Morgan), 1889, T., 606.

Benzeneazo-β-naphthylic benzoate, its reduction, and its *m*-nitro-derivative (Meldola and Morgan), 1889, T., 115.

Benzeneazo-α- and -β-naphthylic ethylates, nitration of (Meldola and Morgan), 1889, T., 608.

Benzeneazo-α-naphthylphenylamine (Fischer and Hepp), 1890, A., 912.

Benzeneazo-β-naphthylphenylamine (Henriques), 1885, A., 168; (Zincke and Lawson), 1887, A., 730.

Azo-compounds—

Benzeneazo-α-naphthyl-*p*-tolylamine (Fischer and Hepp), 1890, A., 912.

Benzeneazo-β-naphthyltolylamine (Matthes), 1890, A., 992; (Fischer), 1892, A., 1476.

Benzeneazonitraniline, nitro- (Oddo), 1891, A., 554.

Benzene-*o*-azonitrobenzene (Janovsky), 1886, A., 794.

Benzene-*p*-azonitrobenzene (Janovsky and Erb), 1885, A., 894; 1887, A., 478.

reduction of (Janovsky), 1885, A., 789.

chloro- (Dahm and Gasiorowski), 1887, A., 248.

Benzeneazonitrobenzenes (Janovsky), 1883, A., 867; 1887, A., 663.

Benzeneazo*di*nitrobenzene, *o*- and *m*-nitro- (Klinger and Zuurdeeg), 1890, A., 762.

p-nitro- and *o*-*p*-*di*nitro- (Willgerodt and Hermann), 1890, A., 1259.

Benzeneazonitrosobenzene-*p*-azochlorobenzene, nitro*di*nitroso- (Willgerodt and Böhm), 1891, A., 907.

*di*nitronitroso- (Willgerodt), 1890, A., 1119; (Willgerodt and Böhm), 1891, A., 907.

Benzeneazonitrobenzeneazodinitronitrosobenzene, chloronitro- (Willgerodt), 1890, A., 1119.

Benzene-*p*-azonitrobenzene, *p*-nitro-, reduction of (Janovsky), 1885, A., 789.

Benzeneazonitrosobenzeneazo*tri*nitrobenzene, chloro- (Willgerodt and Böhm), 1891, A., 907.

Benzeneazonitrosoresorcinol (v. Kostanecki), 1889, A., 137.

Benzeneazo-*ar*-octohydro-α-naphthaquinoline (Bamberger and Stettenheimer), 1891, A., 1261.

Benzeneazophenetoil. See Ethoxyazobenzene.

Benzeneazophenetoilsulphonic acid (Feer and Müller), 1889, A., 258.

Benzeneazophenol, chloro- (Heumann and Oeconomides), 1887, A., 664.

p-nitro-, and *p*-amido- (Meldola), 1885, T., 658, 659.

See also Hydroxyazobenzene.

Benzeneazophenylbiazolone (Freund and Kuh), 1890, A., 1441.

Benzeneazophenyldimethylpyrazole [4:1:3:5-] (Beyer and Claisen), 1888, A., 828.

Azo-compounds—

Benzeneazophenylenediamine and homologues, formation of (Friswell and Green), 1885, T., 923.
amido- (Janovsky), 1885, A., 1131.

Benzeneazo-*m*-phenylenediamine. See Chrysoidine.

Benzeneazophenylenediamineazobenzene (Griess), 1883, A., 1102.

Benzeneazophenylenediamineazobenzenesulphonic acid (*azosulphobenzenephenylenediaminebenzene*) (Griess), 1883, A., 1103.

Benzeneazophenylenediamineazobenzoic acid (Griess), 1883, A., 1103.

Benzeneazophenylenediamineazotoluenes (Griess), 1883, A., 1102, 1103.

Benzeneazophenylic phosphate (Heumann and Paganini), 1891, A., 301.

Benzeneazophenyl*iso*oxalone (Claisen and Zedel), 1891, A., 468.

Benzeneazophenylthio-, *di*thio-, and **ψ-thio-biazolones** (Freund and Kuh), 1890, A., 1440.

Benzeneazopropylene (*azophenylallyl*) (Fischer and Knoevenagel), 1887, A., 933.

Benzeneazoquinoline (Ephraim), 1891, A., 1509.

Benzeneazoresorcinol, and its purification (Meyer and Kreis), 1883, A., 982.
p-nitro-, and *p*-amido- (Meldola), 1885, T., 660.
nitroso- (v. Kostanecki), 1889, A., 137.

p-**Benzeneazoresorcinol** (Goldschmidt and Pollak), 1892, A., 977.

Benzeneazoresorcinyl mono- and dimethyl ethers, *o*- and *p*- (Bechhold), 1889, A., 1155.
conversion of, into hydroxyquinol-derivatives (Bechhold), 1889, A., 1155.

Benzeneazo-β-resorcylic acid (Limpricht), 1891, A., 1037.

Benzeneazosalicylamide and **benzeneazosalicylic aldehyde** (Tummeley), 1889, A., 780.

Benzeneazosalicylic acid (v. Kostanecki and Zibell), 1891, A., 1038.
and its derivatives (Limpricht), 1891, A., 1036.
p-amido-, and *p*-nitro- (Meldola), 1885, T., 666, 667.
nitro- (Geber), 1889, A., 780.

Azo-compounds—

Benzeneazotetrahydro-α-naphthaquinoline (Bamberger and Stettenheimer), 1891, A., 1259.

1′-Benzeneazotetrahydro-β-naphthaquinoline (Bamberger and Müller), 1891, A., 1510.

Benzeneazo-*ar*-tetrahydro-α-naphthol (Bamberger and Bordt), 1890, A., 509.

Benzeneazo-α-tetrahydronaphthylamine (Bamberger and Bordt), 1889, A., 715.

Benzeneazothymol (Mazzara and Possetto), 1885, A., 894.
constitution of (Mazzara), 1885, A., 1131; 1890, A., 884.

Benzeneazo-*p*-toluene (Schultz), 1884, A., 903.

Benzeneazotriphenylpyrazole [4:1:3:5-] (Beyer and Claisen), 1888, A., 828; (de Neufville and v. Pechmann), 1891, A., 319.

Benzeneazoxazole (Russanoff), 1892, A., 322.

Benzeneazoximidobenzene, *tetra*nitro- (Willgerodt), 1892, A., 1454.

Benzeneazo-*m*-xyleneazo-α- and -β-naphthols, *p*-nitro- (Meldola), 1883, T., 434.

Benzeneazo-*m*-xyleneazo-α- and -β-naphtholsulphonic acid, *p*-nitro- (Meldola), 1883, T., 435.

Benzeneazo-*m*-xyleneazophenol, *p*-nitro- (Meldola), 1883, T., 435.

Benzeneazo-*m*-xyleneazoresorcinol, *p*-nitro- (Meldola), 1883, T., 436.

Benzeneazo-*m*-xylenol (Grevingk), 1886, A., 348.

Benzeneazo-*o*-xylidine (Menton), 1891, A., 1205.

Benzeneazo-*m*-xylidine, *p*-amido- and *p*-nitro- (Meldola), 1883, T., 428, 432.

Benzenebisazo-*o*- and -*m*-cresols (Nölting and Kohn), 1884, A., 902.

Benzenebisazomethoxybenzene (Nölting and Kohn), 1884, A., 902.

Benzenebisazo-α-naphthol (Nölting and Grandmougin), 1891, A., 1076.

Benzenebisazoresorcinol (Liebermann and v. Kostanecki), 1884, A., 1147.

Benzenebisazothymol, constitution of (Mazzara), 1890, A., 884.

Benzene-*p*-bromoxybenzene, nitro- and nitroso-derivatives of (Willgerodt and Ellon), 1891, A., 1362.

Benzene-*m*-chlorazoxybenzene, nitronitroso- (Willgerodt and Mühe), 1892, A., 455.

Azo-compounds—
  Benzene-*p*-chloro*di*nitrazobenzene, *di*nitronitroso- (Willgerodt and Böhm), 1891, A., 906.
  Benzenediazoacetanilide (Heusler), 1892, A., 458.
  Benzenediazobenzylanilide, dry decomposition of (Heusler), 1891, A., 555.
  Benzenediazoconiine (Wallach), 1887, A., 137.
  Benzenediazodimethylamide, preparation of (Heusler), 1891, A., 556.
  Benzenediazonitrosodiphenylamine (Fischer and Wacker), 1888, A., 1286.
  Benzenediazonitrosophenyltolylamine (Reichold), 1890, A., 610.
  Benzenediazophenol (Wallach and Schulze), 1883, A., 583.
  Benzenediazopiperidide (Wallach), 1887, A., 137.
    dry decomposition of (Heusler), 1891, A., 555.
  Benzene-*p*-diazopiperidide, fluoro- (Wallach and Heusler), 1888, A., 362.
    nitro- (Wallach), 1887, A., 131.
  Benzenediazoresorcinols, isomeric (v. Kostanecki), 1889, A., 138.
  Benzenediazothiazole hydrate (Schatzmann), 1891, A., 745.
  Benzenediazothymol (Mazzara and Possetto), 1885, A., 894.
  Benzenediazo-*p*-toluidide, *p*-bromo- and *p*-chloro-, methylation of (Meldola and Streatfeild), 1889, T., 433, 437; P., 98.
  Benzenylazosulphimecarbanilide (Tiemann), 1891, A., 558; (Koch), 1891, A., 560.
  Benzenylazosulphimecarbo-*p*-brom- and -nitroso-anilides (Koch), 1891, A., 561.
  Benzenylazosulphimecarbohydro- and -di-sulphides (Crayen), 1891, A., 559.
  Benzenylazosulphimecarbothioethylic ether (Crayen), 1891, A., 560.
  Benzenylazoximeacetylethenyl (Tiemann), 1890, A., 44.
    p-nitro- (Weise), 1890, A., 46.
  Benzenylazoxime*iso*amenyl (Zimmer), 1890, A., 254.
  Benzenylazoximebenzenyl, *m*-amido-, and its derivatives (Schöpff), 1885, A., 1217.
    m-nitro-, and its derivatives (Schöpff), 1885, A., 897, 1217.
    p-nitro- (Weise), 1890, A., 45.
  Benzenylazoximebenzenyl-*o*-carboxylic acid and its salts (Schulz), 1885, A., 1219.
  Benzenylazoxime*iso*butenyl (Zimmer), 1890, A., 254.
  Benzenylazoximecarbinol and its derivatives (Falck), 1885, A., 1217.
  Benzenylazoximecarbo-*p*-toluidide (Koch), 1891, A., 561.
  Benzenylazoxime-ethenyl (Tiemann and Krüger), 1884, A., 1326.
    m-nitro- (Schöpff), 1885, A., 897.
    p-nitro- (Weise), 1890, A., 45.
  Benzenylazoximemethenylcarboxylic acid (Wurm), 1890, A., 258.
  Benzenylazoxime-*m*-nitrobenzenyl, *m*-nitro- (Stieglitz), 1890, A., 256.
  Benzenylazoximephenylethenyl (Zimmer), 1890, A., 253.
  Benzenylazoximepropenyl (Zimmer), 1890, A., 254.
  Benzenylazoximepropenyl-ω-carboxylic acid and its salts (Schulz), 1885, A., 1219.
  Benzenylazoximesalicenyl (Zimmer), 1890, A., 254.
  Benzidineazo-dyes, colouring properties of (Möhlau), 1886, A., 947.
  Benzoylbenzeneazoacetone (Goldschmidt and Pollak), 1892, A., 977.
  Benzoylchlorobenzeneazocresols (Goldschmidt and Pollak), 1892, A., 975.
  Benzoylphenylazimethylene (Curtius and Thun), 1891, A., 1357.
    reactions of (Curtius and Lang), 1892, A., 451.
  Benzylamidobenzeneazo-α- and -β-naphthols (Meldola and Coste), 1889, T., 596.
  Benzylazimidobromobenzene (Zincke and Arzberger), 1889, A., 502.
  Benzyldiazoamidobenzene (Friswell and Green), 1886, T., 749.
  Benzylideneamidoazobenzene (Berju), 1884, A., 1149.
  Benzylidene-*o*-amidoazotoluene (Goldschmidt and Rosell), 1890, A., 616.
  Benzylmalonic azimide (Ruhemann and Morrell), 1892, T., 796.
  Benzylmethylbromobenzeneazammonium iodide (Zincke and Arzberger), 1889, A., 502.
  Bisazobenzene (Nietzki and Diesterweg), 1888, A., 1082.
    chloronitro-, chloronitronitroso-, and nitronitroso-derivatives of (Willgerodt and Mühe), 1892, A., 455, 456.

Azo-compounds—
- **Bisazobenzene-*p*-chlorophenylhydrazine,** *tetra*nitronitroso- (Willgerodt), 1890, A., 1119; (Willgerodt and Böhm), 1891, A., 907.
- **Bisazobenzenephenylhydrazine,** *penta*nitro- (Willgerodt and Mühe), 1892, A., 456.
- **Bisazo-compounds** (Nietzki and Diesterweg), 1888, A., 1082.
  - of α-naphthol, molecular change in the formation of (Nölting and Grandmougin), 1891, A., 1075.
- **Bisbenzeneazoacetone** (v. Pechmann and Jenisch), 1892, A., 161.
- **Bis-*o*- and -*p*-diazoanisoilmethyl- and -ethyl-amines** (Goldschmidt and Badl), 1889, A., 774.
- *m*-**Bisdiazobenzene compounds** (Griess), 1886, A., 459.
- **Bisdiazobenzene-allylamine, -ethylamine, and -methylamine** (Goldschmidt and Badl), 1889, A., 774.
- **Bis-*p*-diazotolueneallylamine** (Goldschmidt and Badl), 1889, A., 775.
- **Bis-*p*-diazotoluene-ethylamine** (Goldschmidt and Holm), 1888, A., 686.
- **Bis-*p*-diazotoluenemethylamine** (Goldschmidt and Badl), 1889, A., 774.
- **Bisdiethylazimethylene** (Curtius and Thun), 1891, A., 1355.
- **Bisdimethylazimethylene** (Curtius and Thun), 1891, A., 1355.
- **Bisdiphenylazimethylene** (Curtius and Rauterberg), 1891, A., 1359.
- **Bispropylmethylazimethylene** (Curtius and Thun), 1891, A., 1355.
- **Bismethylphenylazimethylene** (Curtius and Thun), 1891, A., 1355.
- **Bisphenylazophenol** (v. Baeyer and Kochendörfer), 1889, A., 1162.
- **Carbamidoazobenzene,** and thio- (Berju), 1884, A., 1149; 1885, A., 660.
- **Carbanilidoamidoazobenzene, Carbanilidoamidoazotoluene, Carbanilidobenzeneazo-β-naphthylamine, Carbanilidohydroxyazobenzene** and **Carbanilidophenolbisazobenzene** (Goldschmidt and Rosell), 1890, A., 614.
- **Carboxybenzeneazoacetoacetic acid** (*azoacetoaceticbenzoic acid*) (Griess), 1885, A., 788.
- *m*-**Carboxybenzenylazoximebenzenyl** (Müller), 1886, A., 803.
- **Carboxybenzenylazoximepropenyl-ω-carboxylic acids,** *m*- and *p*- (Müller), 1886, A., 803.

Azo-compounds—
- **Carboxybenzenylazoxime-ethenyl,** *m*- and *p*- (Müller), 1886, A., 802.
- **Carvacrolbisdiazotriphenylmethane** (Mazzara), 1886, A., 59.
- **Cinnamenylazoximebenzenyl** (Wolff), 1886, A., 798.
- **Cinnamenylazoxime-ethenyl** (Wolff), 1886, A., 798.
- **Cinnamenylazoximepropenyl-ω-carboxylic acid** (Wolff), 1886, A., 799.
- **"Cinnamicdiazoacetic acid"** (Buchner), 1888, A., 1275.
- **Cinnamoylphenylazimide,** formation and reduction of (Ruhemann), 1892, T., 282.
- **Cresolbisazotoluenes,** *o*- and *p*- (Nölting and Werner), 1891, A., 212.
- **ψ-Cumeneazo-ψ-cumene.** See Azo-ψ-cumene.
- **ψ-Cumeneazocumenol** (Liebermann and v. Kostanecki), 1884, A., 1147.
- **Cumeneazo-β-naphthol-mono- and -di-sulphonic acids,** spectrum of (Hartley), 1887, T., 187.
- **ψ-Cumeneazophenol** (Goldschmidt and Brubacher), 1891, A., 1210.
- **ψ-Cumenediazopiperidide** (Wallach and Heusler), 1888, A., 362.
- **ψ-Cumeneazoresorcinol** (Liebermann and v. Kostanecki), 1884, A., 736, 1147; (v. Kostanecki), 1889, A., 137.
  - nitroso- (v. Kostanecki), 1889, A., 137.
- **ψ-Cumeneazoresorcinolazocumene** (Liebermann and v. Kostanecki), 1884, A., 736.
- **ψ-Cumenebisazoresorcinol** (Liebermann and v. Kostanecki), 1884, A., 1147.
- **Cumylenediazosulphide** (Jacobson and Ney), 1889, A., 772.
- **Cyanazocamphene** (Tanret), 1888, A., 720.
- **Cymeneazocymene** (*azocymene*) (Schumoff), 1888, A., 469.
- **Dianilido-*o*-diazothiole** (Hector), 1889, A., 872; 1890, A., 526.
- **Diazoacetamide** (Curtius), 1884, A., 988; 1885, A., 883.
- **ψ-Diazoacetamide** (Curtius), 1885, A., 883.
- **Diazoacetates,** ethereal, action of, on ethereal salts of unsaturated acids (Buchner), 1888, A., 1274.
- **Diazoacetic acid,** and its salts (Curtius), 1885, A., 883.

Azo-compounds—

- **Diazoamides**, normal and mixed (Meldola and Streatfeild), 1890, T., 785; P., 139.
- *m*-**Diazoamidobenzamide** (Schulze), 1889, A., 778.
- **Diazoamidobenzene** (*diazobenzeneanilide*) (Fischer), 1884, A., 1014.
  - preparation of (Staedel and Bauer), 1886, A., 943.
  - conditions of formation of (Friswell and Green), 1885, T., 919; P., 102.
  - constitution of (Friswell and Green), 1886, T., 746; P., 229.
  - dry decomposition of (Heusler), 1891, A., 555.
  - action of phenol on (Heumann and Oeconomides), 1887, A., 480.
  - action of *p*-toluidine on (Goldschmidt and Bardach), 1892, A., 978.
  - relation of, to amidoazobenzene (Friswell and Green), 1885, T., 917; P., 102; 1886, T., 746; P., 229; 1887, P., 26.
  - Wallach's explanation of the isomeric transformation of, into amidoazobenzene (Meldola), 1887, P., 27.
  - formation of *di*amidoazobenzene and its homologues from (Friswell and Green), 1885, T., 923.
- **Diazoamidobenzene** (*diazobenzeneanilide*), *p*-bromo-, and its methyl derivative (Meldola and Streatfeild), 1889, T., 435.
  - *tri*- and *hexa*-bromo- (Silberstein), 1883, A., 661.
  - *p*-bromo-*m*- and -*p*-nitro- (Goldschmidt and Molinari), 1888, A., 1285.
    - ethylation and methylation of (Meldola and Streatfeild), 1889, T., 420, 424.
  - *di*bromo*di*nitro- (Meldola and Streatfeild), 1888, T., 669.
  - *m*- and *p*-*di*chloro-, action of *p*-toluidine on (Goldschmidt and Bardach), 1892, A., 978.
  - *p*-*di*chloro-, and its ethyl derivative (Meldola and Streatfeild), 1888, T., 670.
  - *m*-nitro- (Goldschmidt and Molinari), 1888, A., 1285.
  - *m*-*di*nitro- (Meldola and Streatfeild), 1887, T., 107.
  - *p*-*di*nitro- (Meldola and Streatfeild), 1886, T., 626; 1887, T., 102.

Azo-compounds—

- **Diazoamidobenzene** (*diazobenzeneanilide*), *m*- and *p*-*di*nitro-, methylation of (Meldola and Streatfeild), 1888, T., 666.
  - *p*-*m*-*di*nitro-, and its alkyl derivatives (Meldola and Streatfeild), 1889, T., 415.
- **Diazoamidobenzene-β-naphthalene** (*diazobenzenenaphthylamide*) *p*-bromo- (Goldschmidt and Molinari), 1888, A., 1284.
- **Diazoamidobenzenetoluene** (*diazobenzenetoluidide*), *p*-bromo-and *m*-nitro- (Goldschmidt and Molinari), 1888, A., 1284.
- **Diazoamidobromo-β-phenylpropionic acid** (Gabriel), 1883, A., 195.
- **Diazoamido-*m*- and -*p*-chlorobenzene-*p*-toluenes** (*diazochlorobenzene-p-toluidides*) (Goldschmidt and Bardach), 1892, A., 979.
- **Diazoamido-compounds** (Nölting and Binder), 1885, A., 385; 1888, A., 271; (Meldola and Streatfeild), 1886, P., 263; 1887, T., 102, 434, 448; P., 50; 1888, T., 664; P., 63; (Wallach), 1887, A., 137; (Fischer and Wimmer), 1887, A., 819; (Goldschmidt and Molinari), 1888, A., 1283; (Goldschmidt and Badl), 1889, A., 774; (Goldschmidt and Bardach), 1892, A., 977.
  - constitution of (Meldola and Streatfeild), 1887, T., 434, 448; P., 50; (Meldola), 1887, A., 818.
  - cryoscopic experiments with (Goldschmidt), 1891, A., 1211.
  - dry decomposition of (Heusler), 1891, A., 555.
  - action of acetic anhydride on (Heusler), 1892, A., 458.
  - action of aniline hydrochloride on (Goldschmidt and Bardach), 1892, A., 979.
  - action of phenol on (Heumann and Oeconomides), 1887, A., 664.
  - conversion of, into azoamido-compounds (Goldschmidt and Bardach), 1892, A., 977.
  - ethylene derivatives of (Meldola and Streatfeild), 1892, P., 119.
  - of ethyl-*p*-toluidine (Gastiger), 1885, A., 381.
  - of the paraffin series (Curtius), 1884, A., 987.
  - mixed, new method of determining the constitution of (Goldschmidt and Holm), 1888, A., 685.

Azo-compounds—
Diazoamido-compounds, mixed, synthesis of alkyl heterogenous (Meldola), 1889, T., 610; P., 127.
  isomerism of the alkyl derivatives of (Meldola and Streatfeild), 1889, T., 412; P., 98.
 nitrated (Niementowski), 1890, A., 39.
 *di*nitro-, decomposition of, by cold hydrochloric acid (Meldola and Streatfeild), 1887, T., 436.
Diazoamido-ψ-cumene, action of *p*-toluidine on (Goldschmidt and Bardach), 1892, A., 978.
Diazoamido-ψ-cumene-*p*-toluene (Goldschmidt and Bardach), 1892, A., 979.
Diazoamidodiphenylmethane (Manns), 1889, A., 261.
Diazoamidonitrobenzene (Niementowski), 1890, A., 39.
Diazoamidonitrotoluene (Niementowski), 1890, A., 39.
Diazoamido-*o*-toluene (*diazotoluene-toluidide*) (Fischer and Wimmer), 1887, A., 819; (Heusler), 1892, A., 459.
Diazoamido-xylene (*diazoxylenexylidide*) (Fischer and Wimmer), 1887, A., 819.
o-**Diazoazotoluene** (*diazotolueneazotoluene*), action of α- and β-naphthols and β-naphthylamine on (Zincke and Lawson), 1887, A., 731.
 derivatives of (Zincke and Lawson), 1886, A., 795.
p-**Diazoazotoluene salts** (Zincke and Lawson), 1887, A., 732.
p-**Diazoazotolueneimide** (Zincke and Lawson), 1887, A., 732.
o-**Diazobenzaldehyde** (Eliasberg and Friedländer), 1892, A., 1106.
Diazobenzene (Sandmeyer), 1890, A., 1115.
 action of, on acetonedicarboxylic acid (v. Pechmann and Jenisch), 1892, A., 161.
 action of phenol on (Hirsch), 1891, A., 437.
 acid salts of, action of alkalis on (Curtius), 1891, A., 55.
 salts, action of stannous chloride on (Culmann and Gasiorowski), 1889, A., 1156.
 *per*bromide (Saunders), 1892, A., 316.

Azo-compounds—
Diazobenzene chloride, action of acetone on (Bamberger and Wulz), 1891, A., 1450.
  action of benzaldoxime on (Mai), 1892, A., 163.
  action of hydroxylamine on (Mai), 1892, A., 710.
  action of sodium thiosulphate on (Purgotti), 1890, A., 1419.
  reaction of (Oddo), 1891, A., 553.
 nitrate, action of potassium ferrocyanide on (Locher), 1888, A., 589.
 stannochloride (Griess), 1885, A., 789.
 sulphates, *o*- and *m*- (Remsen and Graham), 1889, A., 975.
Diazobenzene, amido- (Griess), 1884, A., 1148.
 *tri*bromo-, nitrate and other salts of (Silberstein), 1883, A., 660.
Diazobenzeneamidocarbazole (Zatti and Ferratini), 1892, A., 617.
Diazobenzeneanilide. See Diazoamidobenzene.
Diazobenzeneazobenzene, combination of, with aniline (Nietzki and Diesterweg), 1888, A., 1082.
Diazobenzeneazobenzene-mono- and -di-sulphonic acids (Griess), 1883, A., 182.
Diazobenzenebenzamidine (Pinner), 1889, A., 1005.
Diazobenzenebenzylamide (Goldschmidt and Holm), 1888, A., 685.
Diazobenzenebenzylanilide (Friswell and Green), 1886, T., 749.
Diazobenzene-*p*-bromodiphenylcarbamide (Goldschmidt and Molinari), 1888, A., 1284.
Diazobenzene-*p*-bromophenyl-*p*-tolylcarbamide (Goldschmidt and Molinari), 1888, A., 1284.
Diazobenzenecumylamide (Goldschmidt and Gessner), 1889, A., 773.
Diazobenzenediphenylcarbamide (Goldschmidt and Molinari), 1888, A., 1283.
Diazobenzene-*p*-ditolylcarbamide (Goldschmidt and Molinari), 1888, A., 1284.
Diazobenzene-ethyl-β-tetrahydronaphthylamide (Bamberger and Müller), 1889, A., 889.
Diazobenzene-ethyl-*p*-toluidide (Nölting and Binder), 1888, A., 273.

Azo-compounds—

Diazobenzeneglyoxaline (Rung and Behrend), 1892, A., 1493.

Diazobenzeneimide, action of stannous chloride on (Culmann and Gasiorowski), 1889, A., 1157.

  *tri*bromo- (Silberstein), 1883, A., 661.

  p-nitro- (Culmann and Gasiorowski), 1889, A., 1157.

Diazobenzenemethylanilide (Friswell and Green), 1886, T., 748; (Nölting and Binder), 1888, A., 273.

Diazobenzene-*o*-and-*p*-methylbenzylamides (Kröber), 1890, A., 969.

Diazobenzenenaphthylamide, *p*-bromo- (Goldschmidt and Molinari), 1888, A., 1284.

Diazobenzene-β-naphthylamine. See Benzeneazo-β-naphthylamine.

Diazobenzene-β-naphthylphenylcarbamide (Goldschmidt and Molinari), 1888, A., 1284.

Diazobenzene-*m*- and -*p*-nitrodiphenylcarbamide, *m*- and *p*-bromo- (Goldschmidt and Molinari), 1888, A., 1285.

Diazobenzene-*m*-nitrophenylcarbamide (Goldschmidt and Molinari), 1888, A., 1285.

Diazobenzenenitrosodimethylaniline (Fischer and Wacker), 1889, A., 702.

Diazobenzenephenyl-*p*-tolylcarbamide (Goldschmidt and Molinari), 1888, A., 1283.

Diazobenzenepiperazine (Schmidt and Wichmann), 1892, A., 211.

Diazobenzenepiperidide (Nölting and Binder), 1888, A., 273.

p-**Diazobenzenesulphonic acid**, action of, on primary amido-compounds, and on isomeric toluidines (Griess), 1883, A., 181.

  behaviour of aldehyde, glucose, peptone, albuminous bodies, and acetone towards (Petri), 1884, A., 1322.

  o-nitro- (Nietzki and Lerch), 1889, A., 144.

Diazobenzene-α-tetrahydronaphthylamide (Bamberger and Bammann), 1889, A., 784.

Diazobenzenetetrahydroquinolide (Nölting and Binder), 1888, A., 273.

Diazobenzenetoluidide, *p*-bromo- and *m*-nitro- (Goldschmidt and Molinari), 1888, A., 1284.

Azo-compounds—

Diazobenzene-*p*-tolylphenylcarbamide (Goldschmidt and Molinari), 1888, A., 1284.

4-**Diazobenzidine-2-2′-disulphonic acid**, 4′-amido- (Limpricht), 1891, A., 929.

Diazobenzimide, *m*-amido-, and its derivatives (Griess), 1885, A., 789.

6-**Diazobenzoic acid**, 3-amido-, and its derivatives (Griess), 1884, A., 1148.

Diazobenzoic acids, action of alcohols on (Griess), 1888, A., 588.

Diazobenzylamidobenzene, *m*- and *p*-*di*nitro- (Meldola and Streatfeild), 1887, T., 112, 113.

Diazo*di*bromobenzene sulphate (Heinichen), 1890, A., 165.

Diazo-*p*-bromobenzenemethyl-*p*-toluidide, combination of diazo-β-naphthalenemethyl-*p*-toluidide, and of diazo-*m*-nitrobenzenemethyl-*p*-toluidide with (Meldola and Streatfeild), 1890, T., 793, 797.

Diazo*iso*butylbenzene, action of stannous chloride on (Culmann and Gasiorowski), 1889, A., 1157.

o-**Diazocinnamic acid**, hydrochloride and nitrate of (Fischer and Kuzel), 1884, A., 441.

p-**Diazocinnamic acid**, decomposition of (Gabriel), 1883, A., 196.

Diazo-compounds (Griess), 1883, A., 180, 1102; 1884, A., 1148; 1885, A., 788; 1887, A., 817; 1888, A., 588, 826; (Wallach), 1883, A., 584; 1887, A., 40, 137.

  constitution of (Meldola and Streatfeild), 1888, T., 664; P., 63.

  thermochemistry of (Vignon), 1888, A., 774.

  molecular weights of (Goldschmidt), 1891, A., 193.

  action of alcohol on (Haller), 1884, A., 1322; (Remsen), 1885, A., 525.

  action of finely divided copper on (Gattermann, Haussknecht, Cantzler and Ehrhardt), 1890, A., 970.

  action of, on hydroxybenzoic acids (Zibell), 1891, A., 1473.

  action of oximes on (Mai), 1892, A., 163, 1079.

  application of, to the detection of organic matter in water (Griess), 1888, A., 993.

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- **Diazo-compounds**, decomposition of (Remsen and Orndorff), 1888, A., 268; (Remsen and Graham), 1889, A., 975.
  - decomposition of, by alcohol (v. Hofmann), 1884, A., 1315; (v. Wroblewski), 1885, A., 257; (Remsen and Palmer), 1887, A., 136.
  - decomposition of some, by formic and acetic acids (Orndorff), 1889, A., 45.
  - double decompositions of (Oddo), 1891, A., 554.
  - velocity of decomposition of, by water (Muller and Hausser), 1892, A., 768.
  - stability of, in aqueous solution (Hirsch), 1891, A., 554.
  - synthesis by means of (Hirsch), 1891, A., 437; 1892, A., 1198.
  - chlorides of, action of stannous salts on the (Gasiorowski and Waijss), 1885, A., 525.
  - mixed (Goldschmidt and Holm), 1888, A., 685.
  - of the aromatic series (Oddo), 1891, A., 553.
  - of *s-tri*bromaniline (Silberstein), 1883, A., 660.
  - of the fatty series (Curtius), 1884, A., 987; 1885, A., 883.
    - constitution of (Curtius), 1889, A., 586; 1891, A., 39.
  - of the thiazole series (Wohmann), 1891, A., 225.
- **Diazo-*m*- and -*p*-chlorobenzene-*p*-toluidides** (Goldschmidt and Bardach), 1892, A., 979.
- **Diazocresol compounds** (Nölting and Kohn), 1884, A., 900.
- **Diazo-α-cymenesulphonic acid** (Errera), 1891, A., 1067.
- **Diazodeoxybenzoin chloride** (Ney), 1888, A., 1197.
- ***o*-Diazodibenzylamine** (Lellmann and Arnold), 1892, A., 890.
- **Diazodiphenylamine sulphate** (Ikuta), 1888, A., 467.
- **Diazoethylamidobenzene**, *m-di*nitro- (Meldola and Streatfeild), 1887, T., 108.
  - *p-di*nitro- (Meldola and Streatfeild), 1887, T., 630.
- **Diazoethylresorcinol chloride** (Pukall), 1887, A., 661.
- **Diazo-group**, introduction of, into so-called aromatic para-compounds (Griess), 1884, A., 1013.

Azo-compounds—

- **Diazoguanidine salts** (Thiele), 1892, A., 1298.
- **Diazohippurylamide** (Curtius), 1892, A., 113.
- **Diazo-hydrocarbons**, action of stannous chloride on salts of (Culmann and Gasiorowski), 1889, A., 1156.
- **Diazohydroxyquinaldine anhydride** (Conrad and Limpach), 1888, A., 1110.
- **Diazoimido-hydrocarbons**, some reactions of (Culmann and Gasiorowski), 1889, A., 1156.
- **Diazomethylamidobenzenesulphonic acid**, sodium salt of (Bernthsen and Goske), 1887, A., 666.
- **Diazomethyluracil derivatives** (Behrend), 1888, A., 809.
- **β-Diazonaphthalene** nitrate, decomposition of, with alcohol (Orndorff and Kortwright), 1891, A., 1073.
  - sulphate, action of stannous chloride on (Culmann and Gasiorowski), 1889, A., 1157.
- **β-Diazonaphthalenebenzylamide** (Goldschmidt and Holm), 1888, A., 685.
- **β-Diazonaphthalene-*p*-bromodiphenylcarbamide** (Goldschmidt and Molinari), 1888, A., 1285.
- **Diazonaphthaleneimide** (Fischer), 1886, A., 555.
- **Diazo-β-naphthalenemethyl-*p*-toluidide**, combination of, with diazo-*p*-bromobenzenemethyl-*p*-toluidide (Meldola and Streatfeild), 1890, T., 797.
  - sulphates, decomposition of, with alcohol (Orndorff and Kortwright), 1891, A., 1073.
- **β-Diazonaphthalene-β-naphthylamine** and its derivatives (Lawson), 1885, A., 1238.
- **Diazonaphthalenes**, nitro-, salts of, decomposition of, with alcohol (Orndorff and Cauffman), 1892, A., 622.
- **Diazonaphthalenesulphonic acid** (Forsling), 1887, A., 375, 963.
- **Diazonaphthalenesulphonic acid [1:2-]** (Cleve), 1892, A., 345.
- **Diazonaphthalenesulphonic acids δ-** and γ- (Cleve), 1889, A., 155.
- **αα-Diazonaphthalenesulphonic acids**, isomeric (Erdmann), 1889, A., 156.
- **Diazonaphtholsulphonic acid** (Seidel), 1892, A., 721.

Azo-compounds—
  Diazonitrobenzene chlorides, decomposition of, by hydrochloric acid (Meldola and Streatfeild), 1887, T., 106.
  Diazo-*m*- and -*p*-nitrobenzene-ethyl-*p*-toluidides (Nölting and Binder), 1888, A., 273.
  Diazo-*m*-nitrobenzenemethyl-*p*-toluidide, combination of, with diazo-*p*-bromobenzenemethyl-*p*-toluidide (Meldola and Streatfeild), 1890, T., 793.
  m-**Diazo-*p*-nitrobenzenesulphonic acid** (Eger), 1889, A., 708.
  Diazonitro-ψ-cumenesulphonic acid (Mayer), 1887, A., 953.
  Diazo*iso*nitrosomethyluracil (Behrend), 1888, A., 809.
  p-**Diazonitroso-oxindole chloride** (Meyer), 1886, A., 64.
  m-**Diazophenetoil** and its derivatives (Wagner), 1885, A., 1212.
  p-**Diazophenol**, *di-m*-bromo- (Silberstein), 1883, A., 660.
    m-nitro- (Hähle), 1891, A., 431.
  Diazophenols, compounds from β-naphthylamine and (Sachs), 1886, A., 235.
  Diazophenolsulphonic acid, chloro- (Kallrepp), 1886, A., 1019.
    *tri*chloro- (Lampert), 1886, A., 617.
  Diazo-reaction (Gattermann, Haussknecht, Cantzler, and Ehrhardt), 1890, A., 971.
  Diazoresorcinol and its derivatives (Brunner and Kraemer), 1884, A., 1333; (Ehrlich), 1888, A., 145; (Nietzki, Dietze, and Maeckler), 1890, A., 156.
  Diazoresorufin and its derivatives (Fèvre), 1883, A., 733; (Brunner and Kraemer), 1884, A., 1333; (Ehrlich), 1888, A., 145; (Nietzki, Dietze, and Maeckler), 1890, A., 156.
  Diazo-salt-group and a phenol-residue, intramolecular transformation between (Lellmann and Boye), 1890, A., 1116.
  Diazo-salts, anhydrous, preparation of (Knoevenagel), 1891, A., 54.
    of amido-3′-hydroxyquinoline, action of, on phenols and tertiary bases (Riemerschmied), 1883, A., 1148.
  Diazosuccinic acid and its derivatives (Curtius and Koch), 1885, A., 885; 1887, A., 33; 1889, A., 376.
  p-**Diazo-*o*-sulphobenzoic acid** (Hedrick), 1888, A., 280.

Azo-compounds—
  Diazosulphonic acids, improvement in Sandmeyer's reaction with (Tobias), 1890, A., 1149.
  Diazothiazole hydrate (Näf), 1891, A., 1515.
  Diazothio-dimethyl- and -diethyl-anilines (Bernthsen), 1889, A., 775.
  Diazotised-*p*-bromaniline, action of, on methyl- and ethyl-*m*- and *p*-nitranilines (Meldola and Streatfeild), 1889, T., 419, 428; P., 98.
      action of, on methyl-*p*-toluidine (Meldola and Streatfeild), 1889, T., 432; P., 98.
    p-chloraniline, action of, on methyl-*p*-toluidine (Meldola and Streatfeild), 1889, T., 436; P., 98.
    m-nitraniline, action of, on methyl- and ethyl-*p*-bromanilines (Meldola and Streatfeild), 1889, T., 425, 428; P., 98.
      action of, on *p*-nitraniline (Meldola and Streatfeild), 1887, T., 102.
    m- and *p*-nitranilines, action of, on monamines (Meldola), 1883, T., 428, 440; 1884, T., 107, 112, 118.
    p-nitraniline, action of, on methyl- and ethyl-*p*-bromanilines (Meldola and Streatfeild), 1889, T., 418; P., 98.
  Diazotoluene, *o*- and *p*-, action of sodium sulphide on (Purgotti), 1890, A., 1420.
  o-**Diazotoluene salts**, action of stannous chloride on (Culmann and Gasiorowski), 1889, A., 1156.
  p-**Diazotoluene chloride**, action of hydroxylamine on (Mai), 1892, A., 710.
  Diazotolueneazotoluene. See Diazo-azotoluene.
  Diazotoluenebenzylamide, *o*- and *p*- (Goldschmidt and Holm), 1888, A., 685.
  p-**Diazotoluene-*p*-bromodiphenylcarbamide** (Goldschmidt and Molinari), 1888, A., 1284.
  p-**Diazotoluenecumylamide** (Goldschmidt and Gessner), 1889, A., 773.
  p-**Diazotoluenedimethylamide** (Goldschmidt and Badl), 1889, A., 774.
  Diazotoluenedisulphonates (Hasse), 1886, A., 150.
  p-**Diazotoluene-*p*-ditolylcarbamide** (Goldschmidt and Molinari), 1888, A., 1284.

Azo-compounds—
- *p*-**Diazotoluene-β-naphthylphenylcarbamide** (Goldschmidt and Molinari), 1888, A., 1284.
- *p*-**Diazotoluene-*m*-nitrodiphenylcarbamide** (Goldschmidt and Molinari), 1888, A., 1285.
- *p*-**Diazotoluenephenyl-*p*-tolylcarbamide** (Goldschmidt and Molinari), 1888, A., 1284.
- **Diazotoluenetoluidide** (*diazoamidotoluene*) (Fischer and Wimmer), 1887, A., 819.
- *p*-**Diazotolylene-*o*-sulphonic acid** (Remsen and Palmer), 1887, A., 136.
- *p*-**Diazotolylethylanilide** (Nölting and Binder), 1888, A., 272.
- **Diazo-*p*-tolylethyl-*p*-toluidide**(Nölting and Binder), 1888, A., 273.
- *m*-**Diazotriazoamidobenzene**(Griess), 1888, A., 827.
- *p*-**Diazotriazobenzene** (Griess), 1888, A., 826.
- **Diazotriazobenzenesulphonic acid** (Limpricht), 1889, A., 398.
- *m*-**Diazotriazobenzoic acid** (Griess), 1888, A., 827.
- *b*-**Diazo-α-truxillic acid** (Homans, Steltzner, and Sukow), 1891, A., 1496.
- **Diazouracil** (Behrend and Ernert), 1890, A., 1241.
- **Diazouracilcarboxylic acid** (Behrend and Ernert), 1890, A., 1240.
- **Diazovinylamine** (Buchner and Curtius), 1886, A., 635.
- **Diazoxybenzoic acid** (Griess), 1887, A., 485.
- **Diazoxylenesulphonic acids** (Nölting and Kohn), 1886, A., 356; 1889, A., 611.
- **Diazoxylenexylidide** (*diazoamidoxylene*) (Fischer and Wimmer), 1887, A., 819.
- **Dibenzenylazosulphime** (v. Hofmann and Gabriel), 1892, A., 1109.
- **Dibenzenyldiazoximeoxalene** (Wurm), 1890, A., 259.
- **Diethylresorcinol-*o*- and -*p*-azoresorcinols** (Pukall), 1887, A., 662.
- **Dihydroxydiphenyldimethyldiazobenzophenylmethane** (Mazzara), 1885, A., 904.
- **Dimethylamidoazobenzene** (*benzeneazodimethylaniline*) (Berju), 1884, A., 1149.
  - as an indicator in alkalimetry (Fischer and Philipp), 1885, A., 1159.

Azo-compounds—
- **Dimethylamidoazobenzene** (*benzeneazodimethylaniline*), *p*-bromo- (Goldschmidt and Bardach), 1892, A., 980.
  - nitro-derivatives of (Nölting), 1888, A., 270.
- **Dimethylamidoazobenzenesulphonic acid** (Nölting and Baumann), 1885, A., 385.
- **Dimethylamidoazo*tri*bromobenzene** (*benzeneazodimethylaniline, tribromo-*) (Silberstein), 1883, A., 661.
- **Dimethylamidobenzeneazobenzenesulphonic acid** (Möhlau), 1884, A., 1149.
  - spectrum of (Hartley), 1887, T., 192.
- **Dimethylamidobenzeneazodimethylaniline** (Nölting and Kohn), 1885, A., 386; (Barbier and Vignon), 1888, A., 54.
- **Dimethylamidobenzene-α-azonaphthalene** (Bischoff), 1890, A., 1148.
- **Dimethylamidobenzeneazotoluene,** and its sulphonic acid (Möhlau), 1884, A., 1150.
- **Dimethylanilineazobenzylpiperidine** (Lellmann and Pekrun), 1891, A., 89.
- **Dimethylaziethane** (Curtius and Thun), 1891, A., 1356.
- **Dimethylazobenzene,** *tetra*nitro-(Mertens), 1886, A., 1022.
- **Dimethylbromobenzeneazammonium compounds** (Zincke and Arzberger), 1889, A., 502.
- **Dimethyl*tri*chlorobromobenzeneazammonium iodide** (Zincke and Arzberger), 1889, A., 502.
- **Dimethylethylazimethylene** (Curtius and Thun), 1891, A., 1355.
- **Dimethylhexylazimethylene** (Curtius and Thun), 1891, A., 1355.
- **Diphenylazocarvacrol** (Mazzara), 1885, A., 1132.
- **Diphenyl-*p*-azophenylene** (v. Bandrowski), 1886, A., 1023; 1888, A., 269, 1081.
- **Diphenylazothymol,** constitution of (Mazzara), 1885, A., 1131.
- **Diphenylbisazonaphtharesorcinol** (v. Kostanecki), 1890, A., 261.
- **Diphenyldi*iso*indoleazobenzenesulphonic acid** (Möhlau), 1883, A., 343.
- **Diphenyldi*iso*indoleazo*tri*bromobenzene hydrochloride** (Möhlau), 1883, A., 342.
- **Diphenyldi*iso*indoleazo*di*bromophenol** (Möhlau), 1883, A., 342.

- Azo-compounds—
  - **Diphenyldimethylazimethylene** (Curtius and Rauterberg), 1891, A., 1359.
  - **Diphenylenebisazodimethylaniline** (Reuland), 1890, A., 167.
  - **Diphenylenebisazo-β-naphthol** (Reuland), 1890, A., 167.
  - **Diphenylenebisazoresorcinol** (Reuland), 1890, A., 167.
  - *p*-**Diphenylhydrazohexamethylene** (v. Baeyer and Noyes), 1889, A., 1148.
  - **Diphenylmethylcinnamaldazimethylene** (Curtius and Rauterberg), 1891, A., 1360.
  - **Diphenylnaphthaleneazammonium hydroxide** and its salts (Zincke and Lawson), 1887, A., 731.
  - **Diphenylpyrazoloneazobenzene** (Knorr and Klotz), 1887, A., 1121.
  - **Di-*o*- and -*p*-tolyl*di*amido-*o*-diazothioles** and their derivatives (Hector), 1890, A., 527.
  - *p*-**Ditriazobenzene** (Griess), 1888, A., 826.
  - *m*-**Ditriazobenzoic acid** (Griess), 1888, A., 827.
  - *m*-**Dixylyl*di*amido-*o*-diazothiole** (Hector), 1890, A., 528.
  - **Ethenylazoximebenzenyl** (Nordmann), 1885, A., 239.
  - **Ethoxyazobenzene** (*benzeneazophenetoil*), base from (Nölting and Werner), 1891, A., 211.
  - *p*-**Ethoxyazobenzene,** preparation, nature, and reduction of (Jacobsen and Fischer), 1892, A., 839.
  - **Ethoxyazobenzenesulphonic acid** (*benzeneazophenetoilsulphonic acid*) (Feer and Müller), 1889, A., 258.
  - **Ethylamidoazobenzenesulphonic acid** (*benzeneazoethylanilinesulphonic acid*), sodium salt of (Bernthsen and Goske), 1887, A., 666.
  - **Ethylazimidobenzene** (Hempel), 1890, A., 612.
  - **Ethylazimidotoluene** (Nölting and Abt), 1888, A., 273.
  - **Ethylic** azobenzene-α-methylphenylpyrroline-β-carboxylate (Paal and Schneider), 1887, A., 274.
    - azopyromellitate (Nef), 1886, A., 64; 1887, A., 257; 1888, T., 443.
    - azoxypropionate (Curtius and Koch), 1889, A., 376.
    - benzeneazocamphocarboxylate (Haller), 1892, A., 1344.
  - **Ethylic** benzenediazo-$\Delta^{1\cdot4}$- and -$\Delta^{2\cdot5}$-dihydroterephthalates (v. Baeyer and v. Brüning), 1891, A., 1487.
    - benzenediazoterephthalate (v. Baeyer and Brüning), 1891, A., 1487.
    - benzenylazoximemethenylcarboxylate (Wurm), 1890, A., 259.
    - cinnamic diazoacetate (Buchner), 1888, A., 1275.
    - diazoacetate and its derivatives (Curtius), 1884, A., 987.
      - constitution of (Curtius), 1889, A., 586.
      - action of, on aromatic hydrocarbons (Buchner and Curtius), 1885, A., 1207.
    - diazobenzoate (Curtius), 1891, A., 55.
    - diazosuccinamate and diazosuccinates (Curtius and Koch), 1885, A., 885.
    - diphenylazimethylenedicarboxylate (Curtius and Lang), 1892, A., 453.
    - methylthiazolecarboxylate diazohydrate (Wohmann), 1891, A., 225.
    - β-naphtholazophenyllutidinedicarboxylate (Lepetit), 1887, A., 1053.
    - α-naphthylazoacetoacetate (Oddo), 1891, A., 1381; 1892, A., 367.
    - phenylazo-acetyl- and -benzoylpyruvates (Beyer and Claisen), 1888, A., 829.
    - phenyl-β-azocrotonate (Bender), 1888, A., 53; (Nef), 1892, A., 143.
    - triazoacetate (Curtius and Lang), 1889, A., 370.
  - **Ethylpyrrolineazo-β-naphthalene** (Fischer and Hepp), 1886, A., 1042.
  - **Ethylpyrrolineazo-*p*-toluene** (Fischer and Hepp), 1886, A., 1042.
  - **Ethylpyrrolinediazo-*p*-toluene** (Fischer and Hepp), 1886, A., 1042.
  - **Glutarenediazoximediethenyl** (Biedermann), 1890, A., 126.
  - *p*-**Hexazobenzene** (Griess), 1888, A., 826.
  - **Hexazobenzoic acid** (Griess), 1888, A., 827.
  - **Hexazoxybenzene** (Janovsky and Erb), 1887, A., 479; (Janovsky), 1887, A., 664; (Willgerodt), 1890, A., 1117.
  - **Homobenzenyl-.** See Tolenyl-.

Azo-compounds—
Homo-*o*-phthalethylimidoazobenzene (Pulvermacher), 1887, A., 1111.
Homo-*o*-phthalimidoazobenzene (Gabriel), 1887, A., 726.
Homoterephthalenediazoximedibenzenyl (Rosenthal), 1890, A., 147.
Homoterephthalenediazoximediethenyl (Rosenthal), 1890, A., 147.
Hydroxyazobenzene (*benzeneazophenol*), action of phosphoric chloride on (Heumann and Paganini), 1891, A., 301.
m-*di*nitro- (Klinger and Pitschke), 1886, A., 53.
Hydroxy-*p*-azobenzenesulphonic acid, salts of (Limpricht), 1891, A., 1037.
Hydroxyazo-compounds (Meyer and Kreis), 1883, A., 982; (Fischer and Wimmer), 1887, A., 819; (Goldschmidt and Rosell), 1890, A., 614; (Goldschmidt and Brubacher), 1891, A., 1209.
o-**Hydroxyazo-dyes.** See under Colouring matters.
3-**Hydroxy-4-azo-1-methylquinoline** (Nölting and Trautmann), 1891, A., 328.
Hydroxyazotoluidine and its salts (Limpricht), 1885, A., 975; (Graeff), 1885, A., 1128.
m-**Hydroxybenzenylazoximebenzenyl** (Schöpff), 1885, A., 1217.
p-**Hydroxybenzenylazoximebenzenyl** (Krone), 1891, A., 700.
m-**Hydroxybenzenylazoxime-ethenyl** (Clemm), 1891, A., 700.
p-**Hydroxybenzenylazoxime-ethenyl** (Krone), 1891, A., 700.
m-**Hydroxybenzenylazoximepropenyl-ω-carboxylic acid** (Clemm), 1891, A., 699.
p-**Hydroxybenzenylazoximepropenyl-ω-carboxylic acid** (Krone), 1891, A., 700.
p-**Hydroxy-*o*-tolenylazoximebenzenyl** (Paschen), 1892, A., 320.
p-**Hydroxy-*m*-tolenylazoximebenzenyl** (Goldbeck), 1892, A., 319.
o-**Hydroxy-*p*-tolenylazoxime-ethenyl** (Goldbeck), 1892, A., 319.
p-**Hydroxy-*o*-tolenylazoxime-ethenyl** (Paschen), 1892, A., 321.
p-**Hydroxytolenylazoximepropenyl-ω-carboxylic acid** (Goldbeck), 1892, A., 319.
Ketazodiphenyl ketone (Curtius), 1889, A., 1157.
Leucazocamphene (Tanret), 1888, A., 720.

Azo-compounds—
Levulinicphenylhydrazoneazobenzene (Volhard), 1892, A., 436.
Methaneazobenzene, iodonitro- (Russanoff), 1892, A., 1416.
Methaneazobenzoic acid, nitro- (Griess), 1885, A., 788.
Methoxybenzenylazoximebenzenyl, *o*- and *p*- (Miller), 1889, A., 254.
p-**Methoxybenzenylazoxime-ethenyl** (Miller), 1889, A., 254.
p-**Methoxybenzenylazoximepropenyl-ω-carboxylic acid** (Miller), 1889, A., 255.
o-**Methoxycinnamic acid diazochloride** (Schnell), 1887, A., 140.
p-**Methoxydiazobenzenesulphonic acid** (Altschul), 1892, A., 1081.
Methylamidoazobenzene (*benzeneazomethylaniline*) and its acetyl derivative (Berju), 1884, A., 1149.
Methylamidoazobenzenesulphonic acid, sodium salt of (Bernthsen and Goske), 1887, A., 666.
Methylazimidothiazolecarboxylic acid (Wohmann), 1891, A., 226.
Methyl*tri*chlorobromazimidobenzene (Zincke and Arzberger), 1889, A., 502.
Methyldiazoamidobenzene (*diazobenzenemethylanilide*) (Friswell and Green), 1886, T., 748.
Methylic acetylenedicarboxylodiazoacetate (Buchner), 1889, A., 694.
benzeneazocyanacetate (Haller), 1888, A., 824.
benzeneazo*di*nitrophenylacetate (Meyer), 1888, A., 693.
azomethylenecarboxylate (Curtius and Lang), 1892, A., 452.
tolueneazocyanacetates, 1:2- and 1:4- (Haller), 1888, A., 824.
benzeneazocamphocarboxylate (Haller), 1892, A., 1344.
diazoacetate, action of, on the ethereal salts of unsaturated acids (Buchner), 1889, A., 694; 1890, A., 736.
α-diazopropionate (Curtius and Lang), 1892, A., 452.
diazosuccinamate (Curtius and Koch), 1887, A., 34.
fumaric diazoacetate (Buchner), 1888, A., 1274.
2′-**Methylindoleazobenzene** (Wagner), 1888, A., 284.
Methyl-*o*-nitro-*p*-diazobenzene chloride, nitroso- (*p-diazotoluenechloride, o-nitro-ω-nitroso-*) (Meyer), 1886 A., 63.

Azo-compounds—
- **Methyl*di*nitrophenylacetateazobenzenesulphonic acid**, sodium salt of (Hausknecht), 1889, A., 507.
- **Methyl*di*nitrophenylacetateazonaphthalene** (Hausknecht), 1889, A., 506.
- **Methyl*di*nitrophenylacetateazotoluene** (Hausknecht), 1889, A., 506.
- **Methyl*di*nitrophenylacetateazoxylene** (Hausknecht), 1889, A., 506.
- **Methylpyrrolinebisazobenzene** (Fischer and Hepp), 1886, A., 1041.
- **Methyltetrahydroquinoline-1-and-3-azobenzenesulphonic acids**, 1- and 3- (Bamberger and Wulz), 1891, A., 1254.
- **Methyl-*p*-toluidine-*o*-azobenzenesulphonic acid** (Bamberger and Wulz), 1891, A., 1203.
- **α-Naphthaleneazoacetic acid** (Oddo), 1891, A., 1382.
- **Naphthaleneazoacetoacetic acids**, α- and β- (Oddo), 1891, A., 1381.
- **α-Naphthaleneazoacetone** (Oddo), 1891, A., 1382.
- **1:2:2′-β-Naphthaleneazodihydroxynaphthalene** (Clausius), 1890, A., 628.
- **α-Naphthaleneazo-α-hydroxynaphthoic acid** (Bischoff), 1890, A., 1148.
- **β-Naphthaleneazo-*o*- and -*p*-hydroxyquinolines** (Mathëus), 1888, A., 851, 852.
- **Naphthaleneazonaphthalene.** See Azonaphthalene.
- **Naphthaleneazo-β-naphthylanilines**, α- and β- (Matthes), 1890, A., 993.
- **Naphthaleneazophenylenediamineazotoluene** (Griess), 1883, A., 1103.
- **Naphthaleneazosalicylic acids** (Gebek), 1889, A., 780.
- **Naphthalenebisazobenzenes**, α- and β- (Nietzki and Diesterweg), 1888, A., 1083.
- **α-Naphthalenebisazobenzene** (Krohn), 1889, A., 152.
- **β-Naphthenylazoximeacetylethenyl** (Richter), 1890, A., 63.
- **β-Naphthenylazoximebenzenyl** (Richter), 1890, A., 62.
- **Naphthenylazoxime-ethenyls**, α- and β- (Ekstrand), 1887, A., 373.
- **β-Naphthenylazoximenaphthenyl** (Ekstrand), 1887, A., 374.
- **Naphtholazobenzenes** (Denaro), 1886, A., 246.
  - derivatives of (Margary), 1884, A., 326; 1885, A., 546.

Azo-compounds—
- **Naphthol-*p*-azobenzeneazodimethylanilines**, α- and β- (Meldola) 1884, T., 109, 110.
- **β-Naphthol-*p*-azobenzeneazodiphenylamine** (Meldola), 1883, T., 441.
- **β-Naphthol-*p*-azobenzeneazodiphenylethylamine** (Meldola), 1884, T., 111.
- **β-Naphthol-*p*-azobenzeneazo-α-naphthaleneazo-*p*-naphthol** (Meldola), 1883, T., 437.
- **β-Naphthol-*p*-azobenzeneazo-α-naphthaleneazo-*p*-naphtholdisulphonic acid** (Meldola), 1883, T., 438.
- **β-Naphthol-*p*-azobenzeneazo-α-naphthaleneazophenol** (Meldola), 1883, T., 439.
- **β-Naphthol-*p*-azobenzeneazo-α-naphthaleneazoresorcinol** (Meldola), 1883, T., 439.
- **α-Naphtholazobenzeneazo-β-naphthol**, and its disulphonic acid (*sodium salt*) (Meldola), 1885, T., 664.
- **Naphtholazobenzeneazo-α- and -β-naphthols**, α- and β- (Meldola), 1885, T., 663, 664.
- **Naphtholazobenzeneazophenols**, α- and β- (Meldola), 1885, T., 665, 666.
- **Naphtholazobenzeneazoresorcinols**, α- and β- (Meldola), 1885, T., 665, 666.
- **β-Naphtholazobenzeneazosalicylic acid** (Meldola), 1885, T., 667.
- **β-Naphthol-*p*-azobenzeneazo-*m*-xyleneazo-β-naphthol** (Meldola), 1883, T., 439.
- **β-Naphtholazonitro-ψ-cumenesulphonic acid** (Mayer), 1887, A., 953.
- **α-Naphtholbisazo-*p*-benzene-*o*-toluene** (*benzeneazonaphtholazotoluene*) (Goldschmidt and Pollak), 1892, A., 977.
- **Naphthol-*p*-azodiphenylsulphonic acids**, α- and β-, sodium salts of (Carnelley and Schleselmann), 1886, T., 383.
- **α-Naphtholbisdiazobenzene** (Krohn), 1889, A., 152.
- **β-Naphthylamine**, azo-derivatives of (Meldola and Hughes), 1891, T., 372; P., 83.
  - constitutional formula for the azo-derivatives of (Meldola), 1884, T., 118.
- **β-Naphthylamines**, secondary, azo-derivatives of (Matthes), 1890, A., 992.

Azo-compounds—
- **Naphthylphenylethylazammonium iodide** (Zincke and Campbell), 1890, A., 787.
- **Nicotenylazosulphimecarbanilide** (Michaelis), 1892, A., 208.
- **Nicotenylazoximebenzenyl** (Michaelis), 1892, A., 207.
- **Nicotenylazoximepropenyl-ω-carboxylic acid** (Michaelis), 1892, A., 207.
- **Oxaleneanilidoximeazoxime-ethenyl** (Zinkeisen), 1890, A., 124.
- **Oxalenediazoximedibenzenyl** (Zinkeisen), 1890, A., 123.
- **Oxalenediazoximedipropenyldicarboxylic acid** (Zinkeisen), 1890, A., 123.
- **Oxyazo-compounds** (Goldschmidt and Pollak), 1892, A., 974.
  - action of phosphoric chloride on (Paganini), 1891, A., 556.
- *p*-**Phenetoilazo-*p*-cresol** (Liebermann and v. Kostanecki), 1884, A., 1147.
- *m*-**Phenetoilazo-β-naphtholsulphonic acid** (Wagner), 1885, A., 1212.
- *p*-**Phenetoilazoresorcinol** (Liebermann and v. Kostanecki), 1884, A., 1147.
- **Phenolazimidonaphthalenes, *o*- and *p*-** (Zincke), 1886, A., 244, 245.
- **Phenolazoacetyl-*m*-amidobenzene** (Wallach and Schulze), 1883, A., 583.
- **Phenolazoamidobenzene hydrochloride** (Wallach and Schulze), 1883, A., 583.
- **Phenol-*p*-azobenzeneazo-*p*-dimethylaniline** (Meldola), 1884, T., 111.
- **Phenolazobenzeneazo-*p*-phenol** (Meldola), 1885, T., 659.
- **Phenol-*p*-azodiphenylsulphonic acid,** sodium salt of (Carnelley and Schleselmann), 1886, T., 382.
- **Phenolazobenzene-*p*-sulphonic acid** (Griess), 1883, A., 181.
- **Phenolbisazobenzene,** constitution of (Goldschmidt and Pollak), 1892, A., 976.
- **Phenolbisazo-*o*- and -*p*-benzenes,** and -*o*- and -*p*-**toluenes** (Goldschmidt and Pollak), 1892, A., 976.
- **Phenolbisazotoluene** (Nölting and Werner), 1891, A., 212.
- **Phenolbisazo-*o*-toluene** (Paganini), 1891, A., 557.
- **Phenolbisazo-*p*-toluene** (Goldschmidt and Pollak), 1892, A., 976.

Azo-compounds—
- *o*-**Phenylazimidobenzene** (Schöpff), 1890, A., 1113; (Kehrmann and Messinger), 1892, A., 889.
  - amido- (Willgerodt), 1892, A., 1322.
  - *tetra*nitro- (Willgerodt), 1892, A., 1454.
- 3:4-**Phenylazimidobenzoic acid** (Schöpff), 1890, A., 374.
- 1:2-**Phenylazimido-3-chlorobenzene** (Ernst), 1891, A., 300.
- αβ-**Phenylazimidonaphthalene** (Zincke), 1886, A., 244; (Zincke and Campbell), 1890, A., 787.
- ψ-**Phenylazimidonaphthalene** (Claus), 1890, A., 788.
- **Phenylazimidotolylamine,** *di*nitro- (Ernst), 1891, A., 300.
- **Phenylazo-.** See also Benzeneazo-.
- **Phenylazoacetoacetaldehyde** (*benzeneazoacetoacetaldehyde*) (Beyer and Claisen), 1888, A., 827.
- **Phenylazoacetoacetic acid** (*benzeneazoacetoacetic acid*), *o*-nitro-, and its derivatives (Bamberger), 1885, A., 157.
- **Phenylazoacetone.** See Pyruvaldehydephenylhydrazone.
- **Phenylazoacetophenone** (*benzeneazoacetophenone*), and *o*-nitro- (Bamberger and Calman), 1886, A., 62.
- **Phenylazoacetylacetone** (*benzeneazoacetylacetone*) (Beyer and Claisen), 1888, A., 828.
- **Phenylazoxazolecarboxylic acid** (Nussberger), 1892, A., 1178.
- **Phenyl-*p*-chloronitrazobenzene** (*benzeneazo-p-chloronitrobenzene*), 2:4-*di*nitro- (Willgerodt and Böhm), 1891, A., 906.
- *o*-**Phenylenediazo sulphide** (Jacobson), 1889, A., 135.
- **Phenylenediazosulphidecarboxylic acid** (Pfitzinger and Gattermann), 1889, A., 868.
- **Phenylethenylazoximebenzenyl** (Knudsen), 1885, A., 897.
  - *p*-cyano- (Rosenthal), 1890, A., 148.
- **Phenylethenylazoxime-ethenyl** (Knudsen), 1885, A., 898.
- **Phenylethenylazoximepropenyl-ω-carboxylic acid** (Knudsen), 1885, A., 1218.
- **Phenylethylamidobenzeneazophenylethylaniline** (Lippmann and Fleissner), 1884, A., 180.
- **Phenylic diazobenzenesalicylate** (Limpricht), 1891, A., 1036.

Azo-compounds—

Phenylmethaneazobenzene, *o*-nitro- (Paal and Bodewig), 1892, A., 1456.

Phenylmethylamidobenzeneazo*tri***bromobenzene** (Silberstein), 1883, A., 662.

Phenylmethylpyrazoloneazobenzene (Knorr), 1887, A., 602; (v. Buchka and Sprague), 1890, A., 29; (Sprague), 1891, T., 336.
  identity of, with phenylhydrazineketophenylmethylpyrazolone (Knorr), 1888, A., 724.

1-Phenyl-3:5-pyrazolidone-4-azobenzene (Michaelis and Burmeister), 1892, A., 1005.

Phenylpyrrolineazobenzene (Fischer and Hepp), 1886, A., 1042.

Picrylazonaphthalenes (*benzeneazonaphthalenes, trinitro-*) (Willgerodt and Schulz), 1891, A., 572.

Picryl-*m*-chlorazobenzene (*benzene-m-chlorazobenzene, trinitro-*) (Willgerodt and Mühe), 1892, A., 454.

Picryl-*p*-chlorazobenzene (*benzene-p-chlorazobenzene, trinitro-*) (Willgerodt and Böhm), 1891, A., 905.

Picryl-*p*-chloronitrazobenzene (*benzeneazochloronitrobenzene, trinitro-*) (Willgerodt and Böhm), 1891, A., 906.

Polyazo-compounds (Willgerodt), 1890, A., 1118.

Propane-*p*-bisazoanisoil, *di*nitro- (Keppler and Meyer), 1892, A., 1062.

Propanebisazobenzene, *di*nitro- (Keppler and Meyer), 1892, A., 1062.

Propanebisazotoluene, *di*nitro- (Keppler and Meyer) 1892, A., 1062.

Propionyl-α-naphtholazobenzene (Goldzweig and Kaiser), 1891, A., 448.

Propyleneazobenzene, nitro- (Meyer), 1892, A., 575.

Propylene-*p*-azoanisoil, propyleneazobenzene, propylene-*m*-azobenzoic acid, propyleneazo-*m*-bromobenzene, propyleneazo-ψ-cumene, propylene-*p*-azophenetoil, and **propylene-*o*- and -*p*-azotoluenes,** nitro-, derivatives of (Askenasy and Meyer), 1892, A., 1062.

Pyrrolineazobenzene, pyrrolineazobenzeneazo-β-naphthalene, pyrrolineazo-*p*-dimethylamidobenzene, pyrrolineazo-α- and -β-naphthalenes, pyrrolineazo-*p*-toluene, pyrrolinebisazobenzene, and **pyrrolinebisazo-α- and -β-naphthalenes** (Fischer and Hepp), 1886, A., 1041.

Quinol-*p*-azodiphenylsulphonic acid, sodium salt of (Carnelley and Schleselmann), 1886, T., 382.

Resorcinol-*p*-azobenzeneazodimethylaniline (Meldola), 1884, T., 110.

Resorcinolazobenzeneazoresorcinol (Meldola), 1885, T., 661.

Resorcinol-*p*-azodiphenylsulphonic acid, sodium salt of (Carnelley and Schleselmann), 1886, T., 382.

Resorcinolbisazobenzenes, 1:3:2:4- and 1:3:4:6- (Goldschmidt and Pollak), 1892, A., 977.

Salicenylazoximebenzenyl (Spilker), 1890, A., 143.

Salicenylazoxime-ethenyl (Spilker), 1890, A., 143.

Salicenylazoximepropenyl-ω-carboxylic acid (Miller), 1890, A., 146.

Salicylaldehyde-*m*- and -*p*-azobenzenesulphonic acids (Tummeley), 1889, A., 779, 780.

Salicylamide-*p*-azobenzenesulphonic acid (Tummeley), 1889, A., 780.

Succinenylazoxybenzene (Sembritzki), 1888, A., 935.

Succinenyldiazoximedibenzenyl (Sembritzki), 1890, A., 125.

Sulphanilazocumenol, potassium salt of (Liebermann and v. Kostanecki), 1884, A., 1147.

Sulphobenzeneazo*di***amidobenzoic acid** (Griess), 1883, A., 184.

Sulphobenzeneazoamidotetrahydronaphthol (Bamberger and Bamman), 1889, A., 784.

Sulphobenzenediazoamido-3-methyltetrahydroquinoline (Bamberger and Wulz), 1891, A., 1255.

Sulphobenzenediazoamidomethyl-*p*-toluidine (*sulphobenzeneazomethyltoluidide*) (Bamberger and Wulz), 1891, A., 1203.

Sulphobenzeneazoethyl-α-naphthylamine (Bamberger and Goldschmidt), 1891, A., 1239.

p-**Sulphobenzeneazo-α-naphthol** (Nölting and Grandmougin), 1891, A., 1074.

Sulphobenzeneazonaphthylaminesulphonic acids (*azoamidosulphonaphthalenebenzenesulphonic acids*) (Griess), 1883, A., 182, 183.

Azo-compounds—

- *p*-**Sulphobenzeneazo-*o*-nitrophenol**, Griess' (Meyer and Kreis), 1883, A., 982.
- **Sulphobenzeneazo-*ar*-octohydro-α-naphthaquinoline** (Bamberger and Stettenheimer), 1891, A., 1260.
- **Sulphobenzeneazo-*ar*-octohydro-β-naphthaquinoline** (Bamberger and Strasser), 1891, A., 1514.
- **Sulphobenzeneazo-β-naphthylphenylamine** (Witt), 1887, A., 590.
- **Sulphobenzeneazotetrahydro-α-naphthaquinoline** (Bamberger and Stettenheimer), 1891, A., 1259.
- **Sulphobenzeneazo-*ar*-tetrahydro-α-naphthol** (Bamberger and Bordt), 1890, A., 509.
- **Sulphobenzeneazo-α-tetrahydronaphthylamine** (Bamberger and Bordt), 1889, A., 715.
- **Sulphobenzeneazotetrahydroquinoline** (Bamberger), 1890, A., 1302.
- **Sulphonamidobenzeneazobenzenesulphonamide** (Limpricht and Meyer), 1892, A., 973.
- **Sulphonamidobenzeneazo*di*bromobenzenesulphonamide**, *di*bromo-, and **sulphonamidobenzeneazo*tri*bromobenzenesulphonamide**, *tri*bromo- (Rodatz), 1883, A., 479, 480.
- **Sulpho-*o*-** and **-*p*-tolylazo-*m*-** and **-*p*-cresols** (*sulphotolueneazocresols*) and salts (Nölting and Kohn), 1884, A., 901, 902.
- **Sulphoxyleneazo-β-naphtholdisulphonic acid**, spectrum of (Hartley), 1887, T., 188.
- **Tetrahydronaphthaleneazo-α-naphthylamine** (Bamberger and Bordt), 1889, A., 715.
- **Tetrahydronaphthaleneazo-β-naphthylamine**, amido- (Bamberger and Bammann), 1889, A., 783.
- **Tetrahydronaphthaleneazoresorcinol** (Bamberger and Bordt), 1889, A., 716.
- **Tetramethyl*di*amidoazobenzene** (*dimethylamidobenzeneazodimethylaniline*) (Nölting and Kohn), 1885, A., 386; (Barbier and Vignon), 1888, A., 54.
- **Tetrazodiphenol** (Kunze), 1889, A., 262.
- **Tetrazodiphenyl** (Täuber), 1891, A., 570.
- **Tetrazodiphenyldisulphonic acid** (Limpricht), 1891, A., 930.

Azo-compounds—

- **Tetrazoleazodimethylaniline** (Thiele), 1892, A., 1299.
- **Tetrazoleazo-β-naphthylamine** (Thiele), 1892, A., 1299.
- **Tetrazostilbene**, dyes from (Bender and Schultz), 1887, A., 268.
- *p*-**Tolenylamidine-*p*-tolenylazosulphimecarbohydrosulphide** (Crayen), 1891, A., 560.
- *p*-**Tolenylazosulphimecarbo-di-** and **-hydro-sulphides** (Crayen), 1891, A., 560.
- *p*-**Tolenylazoximeacetylethenyl** (Schubart), 1890, A., 48.
- *o*-**Tolenylazoximebenzenyl** (Schubart), 1890, A., 49.
- *p*-**Tolenylazoximebenzenyl** (Schubart), 1886, A., 798.
- *p*-**Tolenylazoxime-ethenyl** (Schubart), 1890, A., 47.
- *p*-**Tolenylazoximepropenyl-ω-carboxylic acid** (Schubart), 1890, A., 48.
- *o*-**Tolenylazoxime-*o*-tolenyl** (Stieglitz), 1890, A., 256.
- *p*-**Tolenylazoxime-*p*-tolenyl** (Schubart), 1890, A., 48.
- **Tolueneazimidotoluene** (Zincke and Lawson), 1887, A., 731.
- *p*-**Tolueneazoacetone** (v. Richter and Münzer), 1884, A., 1342.
- **Tolueneazochlorobenzenes, *o*- and *p*-** (Paganini), 1891, A., 556, 557.
- **Tolueneazocyanocamphors, *o*- and *p*-** (Minguin), 1892, A., 1343.
- **Tolueneazodimethylaniline**, and its *p*-azo-β-naphthol and *p*-azophenol compounds (Wallach), 1887, A., 41.
- **Toluene-*o*-** and **-*p*-azodimethylanilines**, *o*- and *p*-acetamido- and *o*- and *p*-amido- (Wallach), 1887, A., 41.
- *p*-**Tolueneazo-*o*-** and **-*p*-hydroxyquinolines** (Mathëus), 1888, A., 851, 852.
- **Tolueneazo-α-naphthol**, amido-, methyl and ethyl ethers of (Witt and Schmidt), 1892, A., 863.
- **Tolueneazo-α- and -β-naphthols, *o*- and *p*-**, and their derivatives (Zincke and Rathgen), 1887, A., 55.
- *p*-**Tolueneazo-β-naphthylphenylamine** (Matthes), 1890, A., 992.
- **Tolueneazophenols, *o*- and *m*-** (Paganini), 1891, A., 556, 557.
- **Tolueneazophenylenediamineazobenzene** (Griess), 1883, A., 1103.
- **Tolueneazophenylic phosphates, *o*- and *p*-** (Paganini), 1891, A., 556, 557.

Azo-compounds—

p-**Tolueneazoresorcinol** (Heumann and Oeconomides), 1887, A., 664.

Tolueneazotoluene. See also Azotoluene.

Tolueneazotoluene-di-ω-sulphonic acid (*p-azobenzyldisulphonic acid*) (Mohr), 1884, A., 69.

o-**Tolueneazo-*m*-toluene** (Schultz), 1884, A., 903.

Toluenediazoacetotoluidide (Heusler), 1892, A., 459.

Toluene-*p*-diazoconiine (Wallach), 1887, A., 137.

Toluene-*o*-, and *p*-**diazopiperidides** and their nitro-derivatives (Wallach), 1887, A., 137.

Toluoylazimide (Niementowski), 1888, A., 837.

p-**Tolylazimidobenzene,** amido- (Willgerodt), 1892, A., 1322.

Toluene-*p*-azoacetoacetic acid, *m*-nitro-, and *m*-amido- (Bamberger), 1885, 157, 158.

Toluene-*p*-azoacetone, *m*-nitro- (Bamberger), 1885, A., 158.

Toluene-*p*-azobenzoylacetic acid, *m*-nitro-, the corresponding acetophenone, and the ketoxime (Bamberger and Calman), 1886, A., 62.

p-**Tolueneazo-*p*-cresetoil** (Nölting and Werner), 1891, A., 214.

p-**Tolueneazo-*p*-cresol,** and its acetic and benzoic derivatives (Nölting and Kohn), 1884, A., 901.

Tolueneazo-*o*- and **-*p*-cresols,** *o*- and *p*- (Nölting and Werner), 1891, A., 212.

p-**Toluene-*o*-azodibenzylamine** (Lellmann and Arnold), 1892, A., 316, 890.

p-**Tolueneazodimethylaniline,** nitro-derivatives of (Nölting), 1888, A., 270.

p-**Tolueneazodimethylanilinesulphonic acid** (Nölting), 1888, A., 271.

Tolueneazophenetoils, *o*- and *p*- (Nölting and Werner), 1891, A., 212.

o-**Tolueneazophenol** (Nölting and Werner), 1891, A., 212.

o-**Tolueneazo-*o*-tolylthio-** and **-dithiobiazolones** (Freund), 1892, A., 513.

p-**Tolueneazo-*p*-tolylthiobiazolone** and *p*-**tolueneazo-*p*-tolyl-ψ-thiobiazolone** (Freund), 1892, A., 512.

Tolylenediamineazobenzeneazobenzenesulphonic acid (*azosulphobenzenetoluenediamine*) (Griess), 1883, A., 1103.

Tolylenic diazosulphide (Jacobson and Ney), 1889, A., 772.

Azo-compounds—

Triazimidoacetamide (Curtius and Lang), 1889, A., 370.

Triazoacetamide (Curtius and Lang), 1889, A., 370.

Triazoacetic acid (Curtius and Lang), 1889, A., 369.

constitution of (Curtius), 1889, A., 587.

Triazobenzene (Griess), 1886, A., 459; (Oddo), 1891, A., 696.

physiological action of (Oddo), 1892, A., 366.

p-amido- (Griess), 1888, A., 826.

Triazobenzenedisulphonic acid (Limpricht), 1889, A., 399.

m-**Triazobenzenesulphonic acid** (Limpricht), 1889, A., 397.

p-**Triazobenzenesulphonic acid** and its derivatives (Griess), 1887, A., 817.

m-**Triazobenzoic acid** (Griess), 1886, A., 459.

m-amido- (Griess), 1888, A., 826.

Triazo*di*bromobenzenesulphonic acid (Limpricht), 1889, A., 399.

Triazonaphthalenesulphonic acid and its derivatives (Griess), 1887, A., 818.

m-**Triazo-oxalamidobenzoic acid** (Griess), 1888, A., 827.

Triazo-*o*-toluenesulphonic acids, *o*- and *p*- (Limpricht), 1889, A., 398.

Trimethylazobenzeneammonium iodide (Berju), 1884, A., 1149.

Triphenylmethylazimethylene (Curtius and Rauterberg), 1891, A., 1360.

Xyleneazoresorcinol (Fischer and Wimmer), 1887, A., 820.

Xyleneazoxylene. See Azoxylene.

m-**Xylenediazopiperidide,** nitro- (Ahrens), 1892, A., 1437.

Xylylenic diazosulphide (Jacobson and Ney), 1889, A., 772.

Azo-group, intramolecular formation of (Lellmann and Arnold), 1892, A., 316.

substitution of, for ketonic oxygen (Curtius), 1889, A., 1157; (Curtius and Lang), 1892, A., 451.

Azoles (Hantzsch), 1889, A., 413.

Azonium bases (Witt), 1887, A., 729; 1891, A., 1108; (Kehrmann and Messinger), 1891, A., 945, 1109; 1892, A., 1108; (Witt and Schmidt), 1892, A., 1246.

Azophenine (Witt and Thomas), 1883, T., 115; (Witt), 1887, A., 821; 1888, A., 54; (Fischer and Hepp), 1887, A., 1105; 1888, A., 472, 1291.

Azophenine, constitution of (Fischer and Hepp), 1887, A., 1105.
  formation of (Fischer and Hepp), 1890, A., 614.
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- **Behenolic acid**, heats of combustion and formation of (Stohmann and Langbein), 1891, A., 11.
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derivatives (Geigy and Koenigs), 1885, A., 1236; (Staedel and Haase), 1890, A., 1422.

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Benzophenone, *o*-amido- (Geigy and Koenigs), 1885, A., 1236.

p-amido- (*benzaniline*) (v. Baeyer and Löhr), 1890, A., 1142.

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(α) 4:4′-*di*amido- (Wichelhaus), 1889, A., 781.

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o-bromo- (Cathcart and Meyer), 1892, A., 992.

- **Benzophenone**, *m*-bromo- (Kottenhahn), 1891, A., 1236.
  - *m*-*di*bromo- (Demuth and Dittrich), 1891, A., 315.
  - *p*-*di*bromo- (Hoffmann), 1891, A., 1236.
  - *o*- and *p*-bromo-*m*-nitro-, *p*-*di*bromo-*m*-nitro-, and *p*-*di*bromo-*di*-*m*-nitro- (Schöpff), 1892, A., 336.
  - *p*-bromo-*m*-nitro-*p*-amido- (Schöpff), 1892, A., 336.
  - α- and β-*p*-chloro-, benzyl ether (Demuth and Dittrich), 1891, A., 314.
  - *p*-*di*chloro- (Dittrich), 1891, A., 1237.
  - *p*-*di*cyano- (Brömme), 1887, A., 484.
  - halogenated, oximes of (Auwers and Meyer), 1890, A., 1144; (Demuth and Dittrich), 1891, A., 314; (Hoffmann), 1891, A., 1236.
  - imido-hydrochloride (Hantzsch and Kraft), 1892, A., 339.
  - iodo- and *p*-*di*iodo- (Hoffmann), 1891, A., 1236.
  - *o*-nitro- (Geigy and Koenigs), 1885, A., 1236.
  - *m*-nitro- (Becker), 1883, A., 203.
  - *p*-nitro- (Basler), 1884, A., 310.
  - *p*-*di*nitro- (Lange and Zufall), 1892, A., 1460.
  - *tetra*nitro- (Staedel), 1883, A., 991.
  - *m*-nitro-*p*-amido- (Schöpff), 1892, A., 336.
  - *tetra*nitro*di*amido- (van Romburgh), 1889, A., 147.
  - thio- (Bergreen), 1888, A., 445.
- **Benzophenoneacetic acid**, *di*thio- (Bongartz), 1886, A., 938.
- **Benzophenone-*p*-amidobenzoic acid** (Hantzsch and Kraft), 1892, A., 340.
- **Benzophenonedicarboxylic acid** (*benzoylphthalic acid*) (Rospendowski), 1886, A., 626.
  - and its lactone (Graebe and Juillard), 1888, A., 155.
- **Benzophenone-*p*-dicarboxylic acid** (Brömme), 1887, A., 484.
- **Benzophenoneoxime**, action of nitric peroxide on (Scholl), 1891, A., 315.
  - action of phosphoric sulphide on (Dodge), 1891, A., 1238.
- **Benzophenoneoximes**, amido- (Auwers and v. Meyenburg), 1891, A., 1378; (Smith), 1892, A., 489.
  - *m*-bromo- (Kottenhahn), 1891, A., 1236.
  - *p*-bromo- (Schäfer), 1891, A., 1235.
  - *di*bromo- (Demuth and Dittrich), 1891, A., 315; (Hoffmann), 1891, A., 1236.
- **Benzophenoneoximes**, *p*-chloro- (Demuth and Dittrich), 1891, A., 314; (Hantzsch), 1891, A., 445.
  - intramolecular change of (Wegerhoff), 1889, A., 1066.
  - *s*-*p*-*di*chloro- (Dittrich), 1891, A., 1237.
- **Benzophenonephenylhydrazone** (Fischer), 1884, A., 1151; (Pickel), 1886, A., 545.
- **Benzophenonesulphone** (Graebe and Schultess), 1891, A., 1059.
- **Benzophenonidene pyrothiophosphite** (Japp and Raschen), 1886, T., 481.
- **Benzophenoxyethylamide** (Schreiber), 1891, A., 552.
- **Benzophenylacetonehydrazide** (*acetonebenzoylphenylhydrazide*) (Ruhemann and Blackman), 1889, T., 615.
- **Benzophenylcarbamide** (Pinner), 1889, A., 1005.
  - preparation of (Kühn), 1885, A., 260.
- **Benzo-*o*-phenylenediamine** (Mixter), 1884, A., 1327.
- **Benzophenylethylthiocarbamide** (Dixon), 1889, T., 305.
- **Benzophenylhydrazide** (Perkin and Stenhouse), 1891, P., 42.
  - amido- (Pellizzari), 1886, A., 1025.
  - *p*-nitro- (Hausskneckt), 1889, A., 507.
- *as*-**Benzophenylhydrazide**, and its derivatives (Michaelis and Schmidt), 1887, A., 820; 1889, A., 1160.
- **Benzophenylhydrazides**, isomeric (Michaelis and Schmidt), 1887, A., 365.
  - See also Benzoylphenylhydrazide.
- **Benzophenylketodihydro-*m*-diazine.** See 3′-Phenyl-2′-ketotetrahydroquinazoline.
- **Benzophenylmethylhydrazide** (Tafel), 1885, A., 1060.
- **Benzophenylsemicarbazide** (Michaelis and Schmidt), 1887, A., 820.
- **Benzophenylsemithiocarbazide** (Dixon), 1889, T., 304.
- **Benzophenyltoluenesulphonamide** (*toluenesulphonbenzanilide*) (Remsen and Palmer), 1887, A., 146.
- β-**Benzopinacoline**, constitution of (Delacre), 1891, A., 456.
- **Benzopinacolines**, α- and β- (Paal), 1884, A., 1167.
- **Benzopiperidylthiocarbamide** (Dixon), 1889, T., 623.
- **Benzopiperylhydrazide** (Knorr), 1884, A., 467.
- **Benzoquinol.** See Quinol.
- **Benzoquinone.** See Quinone.

Benzothiocarbimide and aldehyde-ammonia (Dixon), 1892, T., 532.

Benzothio-β-dinaphthylamide (Kym), 1890, A., 1306.

Benzothiodiphenylamide (Fraenkel), 1885, A., 1130.

Benzotoluenesulphonamide (*toluenesulphonbenzamide*) and its derivatives (Remsen and Palmer), 1887, A., 145.

Benzo-*o*-toluidide, thio- (Stieglitz), 1890, A., 256.

Benzo-*p*-toluidide (Müller), 1890, A., 43.

  p-nitro-, and nitrothio- (Gattermann and Neuberg), 1892, A., 839.

  thio- (Müller), 1890, A., 43.

Benzo-*o*- and -*p*-toluidides (Gudeman), 1888, A., 1282.

Benzo-*p*-toluidimido-chloride (Just), 1886, A., 617.

"**Benzotoluidine sulphite**" (Michaelis), 1891, A., 717.

Benzo-*o*-tolylcarbamide (Gattermann and Cantzler), 1892, A., 832.

Benzo-*o*-tolylhydrazide (Gattermann, Johnson, and Hölzle), 1892, A., 843.

Benzotrichloride, action of copper on (Onufrowicz), 1884, A., 1133.

  action of sodium benzenesulphinate on (R. and W. Otto), 1888, A., 841.

  compounds of, with phenols and phenylamines (Doebner), 1883, A., 861.

  p-chloro- (Klepl), 1884, A., 447.

  o-cyano- (Gabriel and Weise), 1888, A., 261.

Benzotrimethyltrifurfuran. See Benzenetrimethyltrifurfuran.

Benzoxamidine. See Benzenylamidoxime.

Benzoximido-ether (Pinner), 1884, A., 739.

Benzo-*m*-xylylamide (Brömme), 1888, A., 1296.

Benzoxylidide and its thio-derivative (Gudeman), 1888, A., 1282.

Benzo-*m*-xylidide (Smith), 1892, A., 491.

Benzo-*p*-xylidide (Pflug), 1890, A., 606.

Benzoyl, amido*di*cyano-, derivatives of (Griess), 1885, A., 1225.

Benzoylacetaldehyde, action of hydroxylamine on (Claisen and Stock), 1891, A., 451.

Benzoylacetaldoxime (Claisen and Stock), 1891, A., 451.

Benzoylacetamide (Obrégia), 1892, A., 325.

Benzoylacetanilide (Knorr), 1888, A., 1113.

Benzoylacetic acid, and its derivatives (v. Baeyer), 1883, A., 336; (Perkin), 1884, T., 170, 176; 1885, T., 240, 262; P., 17, 31; (v. Baeyer and Perkin), 1884, A., 63, 838; (Perkin and Calman), 1886, T., 154; P., 139; (Perkin and Stenhouse), 1891, T., 996; P. 190.

  p-nitro-, and its derivatives (Perkin and Bellenot), 1884, A., 1023; 1885, A., 794; 1886, T., 440; P., 193.

Benzoylacetone (*acetylacetophenone*) (Fischer and Kuzel), 1884, A., 60; (Gevekoht), 1884, A., 445; (Ceresole), 1884, A., 1167; (Beyer and Claisen), 1887, A., 943; (Claisen and Lowman), 1888, A., 692.

  preparation of (Fischer and Bülow), 1885, A., 1237.

  magnetic rotation of (Perkin), 1892, T., 831, 863.

  action of *p*-amidodimethylaniline on (Vogtherr), 1892, A., 855.

  derivatives of (Fischer and Bülow), 1885, A., 1237.

  dicyanhydrin, acids from (Carlson), 1892, A., 1471.

  methylimide (Beyer), 1891, A., 1091.

Benzoylacetone, α-cyano- (Burns), 1892, A., 451.

  o-nitro-derivative of (Fischer and Kuzel), 1884, A., 59; (Gevekoht), 1884, A., 445.

  oxime of (Ceresole), 1884, A., 1167.

Benzoylacetoneamine (Fischer and Bülow), 1885, A., 1237.

Benzoylacetoneaniline (Beyer), 1887, A., 849.

Benzoylacetonitrile and its derivatives (Haller), 1886, A., 240; 1887, A., 826; 1888, A., 873; (Barthe), 1888, A., 951; (v. Meyer), 1890, A., 849; (Claisen and Stock), 1891, A., 451; (Obrégia), 1892, A., 324; (Garelli), 1892, A., 845.

Benzoylacetophenone, preparation of (Perkin), 1885, T., 251.

Benzoylacetyl. See Phenyl methyl diketone.

Benzoylacetylacetonitrile (*benzoylacetylmethylic cyanide*) (Burns), 1892, A., 451.

Benzoylacetylphosphinous acid (Ville), 1890, A., 619.

Benzoylaconine, formation of (Dunstan and Passmore), 1892, T., 401.

Benzoylallylacetic acid (*benzoylpentenoic acid*) (Perkin), 1884, T., 185; (Baeyer and Perkin), 1884, A., 63.

Benzoylamarine, and its derivatives (Claus and Scherbel), 1886, A., 238.

Benzoylamyl-*d*-ecgonine hydrochloride (Einhorn and Marquardt), 1890, A., 913.

β-Benzoyl-α-*iso*amylpropionic acid (Paal and Hoffmann), 1890, A., 1101.

Benzoylaniline. See Benzophenone, *p*-amido-.

Benzoylanisenylamidoxime (Miller), 1890, A., 145.

***p*-Benzoylanisoil** (Gattermann, Ehrhardt, and Maisch), 1890, A., 963.

Benzoylanthranil, and **benzoylanthranilic acid,** and its salts (Friedländer and Wleügel), 1884, A., 61.

Benzoylazoimide (Curtius), 1891, A., 56.

Benzoyl*iso*benzaldazine (Curtius and Thun), 1891, A., 1356.

" **Benzoylbenzeneazoacetone** " and " **benzoylbenzenehydrazo-*o*-cresol** " (Goldschmidt and Pollak), 1892, A., 975, 977.

" **Benzoylbenzenehydrazo-*p*-cresol** " and " **benzoylbenzenehydrazo-α-naphthol** " (Goldschmidt and Brubacher), 1891, A., 1209, 1211.

Benzoylbenzenetetracarboxylic acid (Essner and Gossin), 1885, A., 254.

Benzoylbenzenylamidoxime (Tiemann and Krüger), 1884, A., 1326.

Benzoylbenzethylhydroxylamine (Pieper), 1883, A., 461.

***o*-Benzoylbenzoic acid** (*benzophenone-o-carboxylic acid*), anthraquinone from (Perkin), 1891, T., 1012.
  phenylhydrazine of (Roser) 1885, A., 797.
  m-chloro- (Graebe and Rée), 1886, T., 530.
  *di*chloro- (Le Royer), 1887, A., 832.
  *tetra*chloro- (Kircher), 1887, A., 831.

***m*-Benzoylbenzoic acid** and its reduction products (Senff), 1884, A., 427.

Benzoylbenzylamarine (Claus and Scherbel), 1886, A., 238.

Benzoylbromothymol (Mazzara), 1890, A., 366.

Benzoylbutaldehyde (Claisen and Meyerowitz), 1890, A., 358.

Benzoyl*iso*butylecgonine (Novy), 1887, A., 1126.
  hydrochloride (Einhorn and Marquardt), 1890, A., 913.

Benzoylbutylic alcohol (Perkin), 1887, T., 733; (Kipping and Perkin), 1890, T., 309.
  oxime of (Kipping and Perkin), 1890, T., 310.
  bromide (Perkin), 1887, T., 732.

Benzoylcaproic acid. See Benzoylhexoic acid.

Benzoylcarbazole (Bizzarri), 1891, A., 220; (Mazzara), 1891, A., 570.

Benzoylcarbinol (*hydroxyacetophenone*), constitution of (Plöchl and Blümlein), 1883, A., 983.
  phenylhydrazone (Laubmann), 1888, A., 366.
  p-nitro- (Engler and Zielke), 1889, A., 505.

Benzoylcarvoxime (Goldschmidt and Zürrer), 1885, A., 1058.

" **Benzoyl-*m*-** and **-*p*-chlorobenzeneazo-*p*-cresols** " and " **benzoyl-*m*-chlorobenzenehydrazo-*p*-cresol** " (Goldschmidt and Pollak), 1892, A., 975.

Benzoyl-compounds, preparation of (Hoffmann and Meyer), 1892, A., 604.
  heat equivalents of (Stohmann, Rodatz, and Herzberg), 1887, A., 878; 1888, A., 333.
  of carbohydrates, glucosamine and glucosides (Kueny), 1890, A., 578.

Benzoylcotarnine and its oxime (Roser), 1890, A., 528.

Benzoyl-ψ-cuminol (Fröhlich), 1884, A., 1319.

Benzoylcyanocamphor (Haller), 1891, A., 1499.

Benzoyldihydropyrroline (Anderlini), 1890, A., 65.
  derivatives of (Anderlini), 1890, A., 1430.

Benzoyldihydroxyanhydroecgonine, derivatives of (Einhorn and Rassow), 1892, A., 1016.

Benzoyldihydroxybenzenesulphonic acid (*dihydroxybenzophenonesulphonic acid*), ammonium salt of (Remsen and Linn), 1889, A., 710.

Benzoyldiphenylsemithiocarbazide (Michaelis and Schmidt), 1887, A., 820; 1889, A., 1160.

Benzoyl*iso*durene (Essner and Gossin), 1885, A., 253.

Benzoylecgonine (Merck), 1885, A., 997; (Skraup), 1885, A., 1249.
  preparation of (Liebermann and Giesel), 1889, A., 168.
  conversion of, into cocaine (Skraup), 1885, A., 1249.

Benzoylenecarbamide. See 2:4′-Diketodihydroquinazoline.

Benzoylethoxyfurfurine (Bahrmann), 1883, A., 800.

Benzoyl-α-ethoxynaphthalene (*ethoxynaphthylphenylketone*) (Gattermann, Ehrhardt, and Maisch), 1890, A., 964.

Benzoylethyl-*o*-carboxylic acid (*phenyl ethyl ketone o-carboxylic acid*) (Roser), 1886, A., 243.

Benzoylethylenecarboxylic acid, phenylhydrazide of (Roser), 1885, A., 797.

α-Benzoylethylic cyanide. See Benzoylpropionitrile.

β-Benzoyl-α-ethylpropionic acid (*benzoylvaleric acid*) (Dittrich and Paal), 1889, A., 257.

β-Benzoyl-α-ethyl*iso*succinic acid (Dittrich and Paal), 1889, A., 257.

Benzoyleugenol, *di*bromo- (Woy), 1890, A., 638.

Benzoyl*iso*eugenol (Tiemann), 1892, A., 46.

Benzoylformic acid. See Phenylglyoxylic acid.

Benzoylformoxime, configuration of (Söderbaum), 1891, A., 1043.
  action of hydroxylamine on (Scholl), 1891, A., 288.

Benzoylglutarimidoxime (Garny), 1892, A., 138.

Benzoylglyoxylic acid, *o*-amido- (*quinisatic acid*), and its salts (v. Baeyer and Homolka), 1884, A., 79.

ω-Benzoylhexoic acid and its oxime (Kipping and Perkin), 1889, T., 350; P., 79.

Benzoylhomobenzenyl-. See Benzoylhydroxytolenyl-.

Benzoylhomoconic acid, and its salts (Schotten and Baum), 1885, A., 176.

Benzoylhomopiperidic acid. See δ-Benzamidovaleric acid.

Benzoylhydrochlorocarvoxime (Wallach), 1892, A., 1348.

β-Benzoylhydrocinnamic acid (Japp and Miller), 1885, T., 32.

Benzoylhydroxycocaylacetic acid (Einhorn), 1889, A., 168.

Benzoylhydroxyethylpyridine (Klein), 1890, A., 1437.

Benzoylhydroxyhydrazobenzene (Goldschmidt and Brubacher), 1891, A., 1210.

α-Benzoylhydroxynaphthaquinone (Kegel), 1888, A., 1308.

Benzoylhydroxypropylpiperidine (Laun), 1884, A., 1055.

Benzoyl-*p*-hydroxytolenylamidoxime (Schubart), 1886, A., 798.

Benzoylhydroxytropeine and its salts (Ladenburg), 1883, A., 671.

Benzoylindole (Ruhemann and Blackman), 1889, T., 617.

Benzoylindolecarboxylic acid (Ruhemann and Blackmann), 1889, T., 617.

Benzoyl*di*iodophenol (Schall), 1883, A., 1109.

Benzoylisatin and **benzoylisatinic acid** (Schotten), 1891, A., 723.

Benzoyllimonene nitrosochloride (Wallach), 1892, A., 1348.

Benzoylmesitylene (*trimethylbenzophenone*) (Louïse), 1883, A., 577.

Benzoylmesitylenic acids (Louïse), 1886, A., 353.

Benzoyl-*p*-methoxybenzenylamidoxime (Miller), 1889, A., 254.

Benzoylmethylecgonine. See Cocaine, under Alkaloids.

Benzoylmethylic cyanide, imido-. See Phenylimidopropionitrile.

Benzoyl-2′-methylindole (Fischer and Wagner), 1887, A., 588.

3-Benzoyl-2′-methylquinoline (*benzoylquinaldine*) (Hinz), 1888, A., 300.

Benzoylmethyltaurine (Gabriel and Heymann), 1891, A., 701.

Benzoyl-2′-methyltetrahydroquinoline, oxidation and nitro-derivatives of (Walter), 1892, A., 882.

Benzoylmethyltrimethylene (Perkin and Stenhouse), 1892, T., 86.

Benzoylmethyltrimethylenecarboxylic acid and its oxime (Perkin and Stenhouse), 1892, T., 84.

α-Benzoylnaphthaquinol (Kegel), 1888, A., 1308.

Benzoylnaphthaquinones, α- and β- (Kegel), 1888, A., 1307.

Benzoyl-β-naphthenylamidoxime (Richter), 1890, A., 62.

Benzoylnicotenylamidoxime (Michaelis), 1892, A., 207.

Benzoylnitrophenylpyrazolecarboxylic acid (Meyer), 1889, A., 516.

Benzoylnitrosoresorcinol, ethyl ether of (Kraus), 1892, A., 45.

Benzoyloscine (Hesse), 1892, A., 1498.

Benzoylosotriazole (Baltzer and v. Pechmann), 1891, A., 1118.

Benzoyloxybutyric trichloride, tertiary (Willgerodt and Dürr), 1889, A., 690.

Benzoylparaleucaniline (Renouf), 1883, A., 981.

***p*-Benzoylphenetoil** (*ethoxybenzophenone*) (Gattermann, Ehrhardt, and Maisch), 1890, A., 964.

Benzoylphenol. See Hydroxybenzophenone.

Benzoylphenylacetaldehyde (Claisen and Meyerowitz), 1890, A., 359.

Benzoylphenylamidoacetic acid (Rebuffat), 1887, A., 1108.
Benzoylphenylazimethylene (Curtius and Thun), 1891, A., 1357.
  reactions of (Curtius and Lang), 1892, A., 451.
Benzoylphenylbenzaldehyde hydrazine (Ruhemann and Blackman), 1889, T., 615.
Benzoylphenyl-*o*-benzoic acid (Elbs), 1890, A., 514.
Benzoylphenylbenzidinehydrazide (Michaelis and Schmidt), 1887, A., 820.
Benzoylphenyl-carbizine and **-thiocarbizine** (Freund and Goldsmith), 1888, A., 1187.
2-**Benzoyl-1-phenyl-3:4-dimethylpyrazolone** (Nef), 1892, A., 146.
Benzoylphenylenediphenylmethane (Hanriot and Saint-Pierre), 1889, A., 882.
Benzoylphenylhydrazide (Ruhemann and Blackman), 1889, T., 612; P., 127.
Benzoylphenylhydrazide. See also Benzophenylhydrazide.
Benzoylphenylhydrazidepyruvic acid (Ruhemann and Blackman), 1889, T., 616.
Benzoylphenylhydrazimethylene (Curtius and Thun), 1891, A., 1356.
Benzoylphenyl*di*iodomethane (*phenyl diiodobenzyl ketone*) (Curtius and Lang), 1892, A., 451.
2-**Benzoyl-1-phenyl-3-methylpyrazolone** and its 4-bromo-derivative (Nef), 1892, A., 146.
4-**Benzoyl-1-phenyl-3-methylpyrazolone** (Nef), 1892, A., 146.
p-**Benzoylphenylphenylsemithiocarbazide** (Ruhemann and Blackman), 1889, T., 615.
β-**Benzoyl-β-phenylpropionic acid** (*deoxybenzoinacetic acid*) (Meyer and Oelkers), 1888, A., 704; (Knoevenagel), 1888, A., 706; 1892, A., 1002.
Benzoyl-1-phenylpyrazole (Balbiano), 1890, A., 798.
Benzoylphenylsemicarbazide (Ruhemann and Blackman), 1889, T., 614.
Benzoylphthalic acid (*benzophenonedicarboxylic acid*) (Rospendowski), 1886, A., 626.
Benzoylphthalo-ψ-cumidide (Fröhlich), 1884, A., 1319.
Benzoylphthalo-ψ-cumidic acid (Fröhlich), 1885, A., 154.
Benzoylphthalo-*p*-toluidide (Fröhlich), 1885, A., 155.
β-**Benzoylpicolinic acid** (Bernthsen and Mettegang), 1887, A., 737.
Benzoylpipecoline (Bunzel), 1889, A., 904.
Benzoylpiperidine, amido- and *m*-nitro-, and their derivatives (Schotten), 1888, A., 1105.
Benzoylpropaldehyde (Claisen and Meyerowitz), 1890, A., 358.
β-**Benzoylpropion-*o*-carboxylic acid** and its salts (Roser), 1885, A., 267.
α-**Benzoylpropionitrile** (*α-benzoylethylic cyanide*) and its imido-derivative (v. Meyer), 1889, A., 577.
Benzoylpropionic acid (Fittig and Leoni), 1890, A., 895.
  oximes of (Dollfus), 1892, A., 1202.
  phenylhydrazone (Kues and Paal), 1886, A., 355.
Benzoyl-β-propionic acids, alkylated (Claus), 1887, A., 827.
Benzoyl*iso*propyl-*o*-carboxylic acid. See Phenyl *iso*propyl ketone o-carboxylic acid.
Benzoylpropylecgonine (Novy), 1887, A., 1126.
Benzoylpropyl-*d*-ecgonine *hydrochloride* (Einhorn and Marquardt), 1890, A., 913.
Benzoylpropylic alcohol (*phenyl hydroxypropyl ketone*), and its oxime (Marshall and Perkin), 1891, T., 886.
Benzoyl-α- and -β-pyridyllactic acids (Einhorn), 1890, A., 521; 1892, A., 76.
ψ-**Benzoylpyrroline** (Ciamician and Dennstedt), 1885, A., 379.
Benzoylpyruvic acid (Beyer and Claisen), 1887, A., 944.
  preparation of (Brömme and Claisen), 1888, A., 691.
  oxime of (Salvatori), 1892, A., 304.
Benzoylquinol (Klinger and Standke), 1891, A., 900.
Benzoylresorcinol, nitro- (Errera), 1886, A., 51.
Benzoylretene (Louïse and Perrier), 1892, A., 1205.
Benzoylsalicenylamidoxime (Spilker), 1890, A., 143.
Benzoylscopoletin (Takahashi), 1889, A., 256.
β-**Benzoyl*iso*succinic acid** (Bischoff), 1883, A., 912; 1886, A., 355; (Kues and Paal), 1886, A., 354.
Benzoylsuccinimidoxime (Garny), 1892, A., 137.
Benzoylsulphobenzamidinic anhydride (Eitner), 1892, A., 713.

Benzoyltannin (Böttinger), 1890, A., 163.
Benzoyltetrahydroquinoline (Hoffmann and Koenigs), 1883, A., 1144.
Benzoyltetramethylene (Perkin), 1883, A., 1084.
Benzoyltetramethylenecarboxylic acid (Perkin), 1883, A., 1084.
Benzoyl*di*thionaphthol. See Dibenzoyldisulphhydronaphthalene.
Benzoyl-*p*-toluic acid (Elbs and Larsen), 1885, A., 261.
1′-Benzoyltolylamido-1:4-naphthaquinone (Kegel), 1888, A., 1308.
Benzoyl-*o*-tolylthiocarbamide (Dixon), 1889, T., 622.
Benzoyltrihydroxybenzamidopyrroline (Rügheimer), 1889, A., 1210.
Benzoyltrimellitic acid (Elbs), 1887, A., 942.
Benzoyltrimethylene (Perkin), 1885, T., 840.
  reduction of (Marshall and Perkin), 1891, T., 885.
  oxime of (Perkin), 1884, A., 1155; 1885, T., 845; (Perkin and Stenhouse), 1892, T., 86.
Benzoyltrimethylenecarboxylic acid and its salts (Perkin), 1884, A., 64; 1885, T., 836.
  action of hydrobromic acid on (Perkin), 1885, T., 842.
  action of water on (Freer and Perkin), 1887, T., 837.
  reduction of (Marshall and Perkin), 1891, T., 884.
  oxime of (Marshall and Perkin), 1891, T., 883.
Benzoyltriphenylpropiomethylamide, and its distillation (Klingemann and Laycock), 1891, T., 147.
Benzoyltropeine (Ladenburg), 1883, A., 671.
Benzoyl-ψ-tropeine (Liebermann), 1891, A., 1265.
Benzoylvaleric acid (*β-benzoyl-α-ethylpropionic acid*) (Dittrich and Paal), 1889, A., 257.
Benzoylxylenylamidoxime (Oppenheimer), 1890, A., 49.
Benzyl, *bis-o*-chloronitrosyl- (Behrend and Nissen), 1892, A., 1200.
  nitro-, chlorides of *o*- and *m*- (Abelli), 1883, A., 1092.
  *bis*nitrosyl- (*dinitrosotoluene*) (Behrend and Konig), 1890, A., 1122.
  bis-p-nitronitrosyl- (Behrend and König), 1891, A., 1035.
Benzyl acetoxime and its hydrochloride (Janny), 1883, A., 581.
Benzyl *iso*amyl and *iso*butyl ethers, decomposition of, by heat and by nitric acid (Errera), 1887, A., 1103.
Benzyl ethyl ether (Müller), 1886, A., 875.
  p-chloro- and *p*-bromo-, and their decomposition by heat and by nitric acid (Errera), 1887, A., 1103.
  o-chloro-*p*-nitro- (Witt), 1892, A., 445.
Benzyl mercaptan, *p*-bromo- (Jackson and Hartshorn), 1884, A., 665.
  o-cyano- (Day and Gabriel), 1890, A., 1250.
Benzyl methyl ether, action of phosphoric chloride on (Colson), 1885, A., 252.
  o-chloro-*p*-nitro- (Witt), 1892, A., 444.
Benzyl methyl ketone, bromo*di*nitro- (Jackson and Moore), 1889, A., 781; 1890, A., 773.
  *tri*nitro- (Dittrich), 1890, A., 1419.
Benzyl selenomercaptan, *o*-cyano- (Drory), 1891, A., 1460.
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Benzyl *o*-, *m*-, and *p*-**xylyl ketones** (Wege), 1892, A., 338.
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  p-nitro- (Amsel and v. Hofmann), 1886, A., 698; (Hafner), 1889, A., 982; 1890, A., 486.
Benzylacetanilide (Meldola and Salmon), 1888, T., 780.
  o-amido- (Paal and Krecke), 1892, A., 80.
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Benzylacetoacetic acid (Ceresole), 1883, A., 41.
Benzylacetomethylamide, *o*-nitro-, and *o*-amido- (Gabriel and Jansen), 1892, A., 218.
Benzylacetone, *m*-amido- (V. Miller and Rohde), 1890, A., 1138.
  nitroso- (Ceresole), 1883, A., 41.
Benzylacetone-*o*-carboxylic acid (Bülow), 1887, A., 144.
Benzylaceto-*p*-nitranilide (Meldola and Salmon), 1888, T., 779.
Benzylacetophenone (*phenyl phenylethyl ketone*) (Schneidewind), 1888, A., 705; (Perkin and Stenhouse), 1891, T., 1007.
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Benzylaceto-*p*-toluidide, *o*-amido- (Söderbaum and Widman), 1890, A., 1258.

Benzylacetoxyphosphinous acid (*acetoxylbenzylphosphinous acid*) (Ville), 1890, A., 619.

Benzylacetylglutaric acid (Fittig and Christ), 1892, A., 963.

Benzylallylthiocarbamide (Dixon), 1891, T., 559.

"**Benzylalsorbitol**" (Meunier), 1890, A., 730.

Benzylamarine, and its derivatives (Claus and Elbs), 1883, A., 982; (Claus and Kohlstock), 1885, A., 1132.
  benzoylchloride (Claus and Scherbel), 1886, A., 238.
  platinochloride (Claus and Elbs), 1883, A., 982.

Benzylamidoacetic acid, benzylamide of (Hinsberg), 1892, A., 1458.

o-**Benzylamidoacetophenone,** and its nitroso-derivative (v. Baeyer), 1884, A., 1021.

Benzylamidobenzeneazo-α- and -β-naphthols (Meldola and Coste), 1889, T., 596.

Benzylamidobenzoic acid (Claus and Glyckherr), 1883, A., 1009.

Benzylamidodimethylaniline (Kohler), 1888, A., 50.

Benzyl-*p*-amidodiphenylamine (Hencke), 1890, A., 609.

Benzylamidosulphonic acid (Schmidt), 1892, A., 476.

Benzylamine (Curtius and Lederer), 1887, A., 40.
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Benzylamine, *o*-amido- (Gabriel), 1887, A., 1037.
  m-amido- (Gabriel and Hendess), 1888, A., 144.
  p-amido-, and its salts (Amsel and v. Hofmann), 1886, A., 698; (Hafner), 1889, A., 982; (Salkowski), 1889, A., 1174.
  *di*iodo- (Biltz), 1892, A., 1449.
  o-nitro- (Gabriel), 1887, A., 1037; (Gabriel and Jansen), 1892, A., 217.
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  p-nitro- (Hafner), 1890, A., 486.
    hydrochloride (Hafner), 1889, A., 982.
  di-o-nitro- (Gabriel and Jansen), 1892, A., 218.
  *tri*nitro- (Marquardt), 1886, A., 615.

Benzylamine-*p*-carboxylic acid (Günther), 1890, A., 977.

Benzylammonium succinates and their derivatives (Werner), 1889, T., 627; P., 127.
  thiocyanate (Dixon), 1891, T., 553.

Benzylangelicalactone (Erdmann), 1890, A., 376.

Benzylaniline, molecular refraction and dispersion of (Gladstone), 1891, T., 296.
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  o-chloro-*p*-nitro-. (Witt), 1892, A., 445.
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  p-nitroso- (Fischer and Hepp), 1890, A., 614; (Boeddinghaus), 1891, A., 1205.

Benzyl*iso*anisaldoxime (Goldschmidt), 1890, A., 1262.

γ-**Benzylanthracene** (Bach), 1890, A., 1145.

Benzylanthracenesulphonic acid, barium salt of (Bach), 1890, A., 1145.

Benzylanthranol (Bach), 1890, A., 1425.

Benzylarbutin (Schiff), 1884, A., 432.

Benzylarsines (Michaelis and Paetow), 1885, A., 526.

Benzylbarbituric acid (Conrad and Guthzeit), 1883, A., 314.
Benzylbenzaldoximes, *α*- and *β*- (Beckmann), 1889, A., 607, 608.
Benzyl*iso*benzaldoxime (Behrend and König), 1890, A., 1123.
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  m-nitro- (Behrend), 1892, A., 50.
Benzylbenzamide, *o*-amido-, and *o*-nitro- (Gabriel and Jansen), 1890, A., 1442.
Benzylbenzenylamidine (Kehrmann and Messinger), 1892, A., 1110.
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m-**Benzylbenzoic acid**, and its salts (Senff), 1884, A., 428.
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Benzylbromazimidobenzene (Zincke and Arzberger), 1889, A., 502.
Benzyl*iso*butylamine (Zaunschirm), 1888, A., 1077.
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γ-**Benzyl-*δ*-caprolactone.** See *δ*-Hydroxy-*γ*-benzylhexoic acid, lactone of.
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Benzyl-*o*-chloro*iso*benzaldoxime, *o*-chloro- (Behrend and Nissen), 1892, A., 1199.
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Benzylcyanocamphor and its *o*-nitro-derivative (Haller), 1891, A., 1499.
Benzyldeoxybenzoin (Meyer and Oelkers), 1888, A., 703.
  p-amido-, and *o*- and *p*-nitro- (Buddeberg), 1890, A., 1142.
Benzyldiazoamidobenzene (Friswell and Green), 1886, T., 749.
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Benzyldimethylamine (Jackson and Wing), 1887, A., 721.
  m-nitro- (Borgmann), 1886, A., 57.
o-**Benzyl-*m*-dimethylbenzoic acid** (Gresly), 1886, A., 1029.
Benzyldimethylcarbamide (Hinrichsen), 1889, A., 391.
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"**Benzylenes**, *α*- and *β*-," and a nitro-derivative of (Gladstone and Tribe), 1885, T., 450.
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Benzylethylamidobenzenephosphinic chloride (Michaelis and Schenck), 1891, A., 437.
Benzylethyl-*m*-amidophenol, *o*-amido- (Lellmann and Boye), 1890, A., 1116.
  o-nitro-, hydrochloride (Lellmann and Boye), 1890, A., 1116.
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Benzylethylaniline (Friedländer), 1889, A., 606.
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Benzylethylglutaric acid (Guthzeit and Dressel), 1891, A., 179.
s-**Benzylethylsuccinic acid** (Bischoff and Walden), 1889, A., 959.
Benzylethyl*di*thiocarbamic acid (Zaunschirm), 1888, A., 1077.
Benzylethylthiocarbamide (Dixon), 1889, T., 300.
Benzylethyl-*p*-toluidine (Rabaut), 1892, A., 313.
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Benzylformanilide (Pictet and Crépieux), 1888, A., 689.
  o-nitro- (Paal and Busch), 1890, A., 72.
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Benzylfumaramic acid (Giustiniani), 1892, A., 821.
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α-**Benzylhomophthalamide.** See *o*-Carboxyphenylbenzylacetamide.
α-**Benzylhomopiperidinic acid** (Aschan), 1891, A., 467.
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  derivatives of (Behrend and Leuchs), 1889, A., 500.
α-**Benzylhydroxylamine** (Beckmann), 1889, A., 608.
β-**Benzylhydroxylamine**, and its derivatives (Beckmann), 1889, A., 608; (Behrend and Leuchs), 1889, A., 704; (Behrend and König), 1891, A., 1033.
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  p-nitronitroso-, and nitroso- (Behrend and König), 1891, A., 1034, 1035.
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    o-amido-, and its derivatives (Söderbaum and Widman), 1889, A., 972; 1890, A., 178; (Söderbaum), 1890, A., 1254.
    p-amido-, and its derivatives (O. and G. Fischer), 1891, A., 695.
    p-bromo- and *p*-chloro-derivatives (Errera), 1889, A., 247.
    o-chloro-*p*-amido-, and *o*-chloro-*p*-nitro- (Witt), 1892, A., 445.
    p-nitro- (Hafner), 1890, A., 486.
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    o-chloro-*p*-nitro- (Tiemann), 1891, A., 704.
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  chloride, action of bromine on (Srpek), 1891, A., 44; (Errera), 1891, A., 1020.
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    action of powdered zinc on (Prost), 1886, A., 1034.
    chloride, amido- (Borgmann), 1886, A., 56.

- **Benzylic** chloride, *o*-cyano- (Gabriel and Otto), 1887, A., 1035; (Day and Gabriel), 1890, A., 1249; (Drory), 1891, A., 1460.
      - action of, on ethylic sodacetoacetate and on ethylic sodomalonate (Hausmann), 1889, A., 1172.
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    - nitro-, reduction of (Pellizzari), 1885, A., 770.
    - *o*-nitro- (Kumpf), 1884, A., 1004; (Nölting), 1884, A., 1005; 1885, A., 52.
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  - hydroxycamphocarboxylate (Minguin), 1892, A., 74.
  - imidodicarbothioxylate (Fromm), 1892, A., 844.
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  - iodides, *o*- and *p*-nitro- (Kumpf), 1884, A., 1004.
  - methylic selenide, *o*-cyano- (Drory), 1891, A., 1461.
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  - nitrate, *p*-nitro- (Staedel), 1883, A., 866.
  - phenylimidophenylbenzylthiocarbamate (Werner), 1892, P., 97.
  - phenylimidophenylthiocarbamate (Werner), 1890, T., 298.
  - picrate, *p*-nitro- (Kumpf), 1884, A., 1005.
  - *di*selenide and selenocyanate, *o*-cyano- (Drory), 1891, A., 1460, 1461.
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  - *di*sulphide, *di*-*o*-cyano- (Day and Gabriel), 1890, A., 1251.
  - *mono*- and *di*-sulphides, *p*-bromo- (Jackson and Hartshorn), 1884, A., 665.
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  - $\Delta^{2\ \text{cistrans}}$ tetrahydroterephthalate (v. Baeyer and Herb), 1890, A., 1134.
  - thiocyanate, *o*-cyano- (Day and Gabriel), 1890, A., 1249.
  - thiocarbamate, preparation, reactions and properties of (Werner), 1890, T., 293.
  - *o*-toluate, action of sodium on (Hodgkinson), 1891, P., 167.
  - *o*-tolylcarbamate (Gattermann and Cantzler), 1892, A., 832.
  - tricarballylate (Däumichen), 1889, A., 238.
- **Benzylideneacetone.** See Styryl methyl ketone.
- **Benzylideneacetophenone** (Claisen and Ponder), 1884, A., 1167.
- **Benzylideneamidocarbazole** (Mazzara and Leonardi), 1892, A., 616.
- *p*-**Benzylideneamidodimethylaniline** (Calm), 1885, A., 388.
- **Benzylidene-*p*-amidodiphenylamine** (Hencke), 1890, A., 609.
- **Benzylideneamidoguanidine** (Thiele), 1892, A., 1297.
- **Benzylidene-*o*-amidophenol** (Pictet and Ankersmit), 1892, A., 196.
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- **Benzylideneamidophenyltolylamine and** its *p*-nitro-derivative (Reichold), 1890, A., 610.
- **Benzylideneaniline** (Hantzsch), 1891, A., 50.
- **Benzylideneanthrone**, amido- (Bach), 1890, A., 1425.
- **Benzylideneantipyrin** (Knorr), 1884, A., 1378.
- **Benzylideneazine**, and its *o*-nitro-derivative (Curtius and Jay), 1889, A., 393.
- **Benzylidenebenzamide** (Beckmann), 1891, A., 194.
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- **Benzylidenebenzidine**, *m*-nitro- (Schiff and Vanni), 1890, A., 1298.
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- **Benzylidenebisdiphenylpyrazolone** (Knorr and Klotz), 1887, A., 1121.
- **Benzylidenebishydroxynaphthaquinone** (Zincke and Thelen), 1888, A., 1097.
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- **Benzylidenecamphor** (Haller), 1891, A., 1498.

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Benzylidene-*di*-and-*tetra*-chlorophthalides (Gabriel and Hendess), 1888, A., 145.

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Benzylidene-*p*-dimethylphenylenediamine (Calm), 1885, A., 388.

Benzylidenedi-*a*-naphthol and **-naphthylic oxide** (Claisen), 1887, A., 270.

Benzylidenediphenyldisulphone (Laves), 1892, A., 612.

Benzylidenedipiperyl (Laun), 1884, A., 1011.

Benzylidenedi*iso*propylindole (Dennstedt), 1889, A., 401.

Benzylidenedi*iso*propylmethylenediamine (Mason), 1887, A., 493.

Benzylidenedisulphone (Bongartz), 1886, A., 938.

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2:5-*di***Brom-3:6-*di*amidocymenes** (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1200, 1201.

*di***Brom*di*amidodiphenyl** [m.p. 108°] (Schultz), 1884, A., 903.

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2:5-**Bromamido-3-ethoxy-1-methyl-4-propylbenzene** (Mazzara and Vighi), 1890, A., 883.

2:3-**Bromamido-1:4-naphthaquinone** and its imide (Zincke and Gerland), 1887, A., 838.

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Bromamidophenetoils (Staedel), 1883, A., 662.

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*di***Brom-*p*-amidophenol** (Möhlau), 1884, A., 594; (Lellmann and Grothmann), 1885, A., 266.
*tri***Bromamidophenol** (Daccomo), 1885, A., 889.
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2:2′-**Bromamidoquinoline** [m. p. 62°] (Claus and Vis), 1889, A., 281.
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2:5-**Bromamidothymol ethyl ether** (Mazzara and Vighi), 1890, A., 883.
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α-**Brom-β-anilidocrotonic acid** (Knorr and Antrick), 1885, A., 273.
*di***Bromanilidonaphthaquinoneanilide** (Fischer and Hepp), 1888, A., 473.
*tri***Brom-α-anilidopropionitrile** (Stephan), 1887, A., 143.
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*tri***Bromapiole** (Ginsberg), 1888, A., 1206.
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*tri***Brom*iso*apiole** (Ginsberg), 1888, A., 1206.
*di***Bromapione** (Ciamician and Silber), 1888, A., 1100.
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ω-**Bromethylbenzene,** from styrolene (Bernthsen and Bender), 1883, A., 70.
*penta***Bromethylbenzene** (Friedel and Crafts), 1886, A., 229.
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- *as-di***Bromethylene**, formula of (Michael), 1884, A., 418.
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- **Bromethylmalic acid**, sodium salt of (Mulder and Hamburger), 1883, A., 312.
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- **γ-Bromethylmalonic acid** [m.p. 116°] (Perkin), 1885, T., 814.
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  - preparation of (Gabriel), 1889, A., 870.
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- **Bromethyltheobromine** and its derivatives (Fischer), 1883, A., 357.
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4:1-**Bromiodo**-*β*-**acetonaphthalide** (Meldola and Desch), 1892, T., 767.

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*di***Bromiodoethylene** (Homolka and Stolz), 1885, A., 1198.

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m-**Bromobenzanilide** (Kottenhahn), 1891, A., 1237.

*tri***Bromobenzanilide** (Borrelli), 1888, A., 1292.

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Bromocymenesulphonic acids. See Cymenesulphonic acid.

*tri***Bromo-*m*-*iso*cymenol** (Jesurun), 1886, A., 697.

Bromocymo-quinols and **-quinones.** See Cymoquinols.

Bromodaturic acid (Gérard), 1892, A., 582.

Bromodecylic acetate (Grosjean), 1892, A., 691.

Bromodehydracetic acid (Perkin and Bernhart), 1884, A., 1121; (Perkin), 1887, T., 490; (Feist), 1892, A., 584.

Bromodehydrobenzyloxanthranol (Bach), 1890, A., 1145.

*di***Bromodehydronicotine** (Pinner), 1892, A., 1497.

*di***Bromodeoxybenzoin-*p*-carboxylic acid** (Bucher), 1890, A., 168.

Bromodeoxypyranilpyroic acid, Reissert's (Anschütz and Hensel), 1889, A., 258.

*di***Bromodiacetyl** (*dibromodimethyldiketone*) (Fittig, Daimler and Keller), 1889, A., 491.

s-*tetra***Bromodiacetyl** (Keller), 1890, A., 359.

*di***Bromodiacetylbrazilein** (Schall and Dralle), 1890, A., 997.

*tri***Bromodianilidopyruvic acid** (Böttinger), 1891, A., 1054.

*di***Bromodianthranyl** (Liebermann and Gimbel), 1887, A., 965; (Sachse), 1888, A., 1201.

Bromodianthranyls, *di*- and *hexa*- (Sachse), 1890, A., 638.

Bromodiazo-. See Diazo- under Azo-.

*di***Bromodi-ψ-cumenol**, and methyl ether of (Auwers), 1886, A., 144.

Bromo-1:3-diethoxybenzenes, α- and β- (Herzig and Zeisel), 1890, A., 1404.

*di***Bromo-3:5-diethoxytoluene** (Herzig and Zeisel), 1890, A., 1405.

Bromodiethylæsculetin (Will), 1884, A., 69.

*di***Bromodiethylsulphonemethane** (Baumann), 1887, A., 124.

*di***Bromodifurfurodiacetylene** (Gibson and Kahnweiler), 1890, A., 960.

*hexa***Bromodihydrobenzene** (Theurer), 1888, A., 1085.

Bromodihydronaphthalene (Agrestini), 1883, A., 346.

*di***Bromodihydroxydiphenylamine** (Möhlau), 1884, A., 594.

Bromodihydroxyphenylbutyrolactone (Fischer and Stewart), 1892, A., 1447.

*di***Bromo-3:6-dihydroxy-1:4-terephthalic acid** (Böniger), 1888, A., 954.

Bromodihydroxyxanthone, derivatives of (Graebe and Eichengrün), 1892, A., 1226.

Bromodihydroxyxylene [m.p. 126°] (Wischin), 1891, A., 74.

*di***Bromodimethoxybenzoic acid** (v. Boyen), 1888, A., 680.

*di***Bromodimethyl diketone** (*dibromodiacetyl*) (Fittig, Daimler and Keller), 1889, A., 491.

p - **Bromodimethylamidoazobenzene** (Goldschmidt and Bardach), 1892, A., 980.
*di***Bromo-1:3-dimethylanthracene** (Elbs), 1890, A., 511.
Bromodimethylbenzoic acids and their salts (Gunter), 1884, A., 1347.
*αα-di***Bromo-***αα***-dimethylglutaric anhydride** (Auwers and Jackson), 1890, A., 1099.
*di***Bromodimethylheptamethylene** (Kipping and Perkin), 1889, P., 145.
*di***Bromodimethylmalonamide** (Freund), 1884, A., 1124.
*di***Bromo-4:6-dimethylpyridine** (*dibromolutidine*) (Pfeiffer), 1887, A., 845.
Bromo-1′:4′-dimethylquinoline (Knorr), 1887, A., 160.
Bromo-2:5-dimethylthiophens, *di-* and *tri-* (Paal), 1885, A., 1206.
Bromodi-β-naphthyl ketone oxide (Claus and Ruppel), 1890, A., 510.
Bromodi-β-naphthylamines, *tetra-* and *octo-* (Ris), 1888, A., 57.
*tetra***Bromodinaphthylene oxide** (Hodgkinson and Limpach), 1891, T., 1100.
*di***Bromodioxydehydronicotine** (Pinner), 1892, A., 1497.
Bromodiphenic acid (Carnelley and Thomson), 1885, T., 591; P., 88.
Bromodiphenylcarbamide (Gattermann and Cantzler), 1892, A., 833.
p - **Bromodiphenylcarbamide** (Goldschmidt and Molinari), 1888, A., 1284.
*di***Bromodiphenylcarboxylic acid** [m.p. 212°] (Holm), 1883, A., 922.
*di***Bromodiphenylcarboxylic acids** [m.p. 204° and 232°] (Carnelley and Thomson), 1885, T., 589; P., 88.
Bromodiphenylene ketone (Claus and Erler), 1887, A., 269.
*di***Bromodiphenylene ketone** (Hodgkinson and Matthews), 1883, T., 165; (Holm), 1883, A., 921; (Claus and Erler), 1887, A., 269.
Bromodiphenylene ketone oxide. See Bromoxanthone.
*tetra***Bromodiphenylfurfuran** (Perkin and Schloesser), 1889, P., 163; 1890, T., 954.
Bromodiphenylguanidine *di*cyanide (Hirsch), 1888, A., 947.
Bromodiphenylmethane, preparation of (Henderson), 1891, T., 731.
*di***Bromodipiperonylidenacetone** (Salkowski), 1891, A., 1475.
*di***Bromo-***p***-dipropylbenzene** (Körner), 1883, A., 322.
*tetra***Bromodipropylcarbinylic acetate** (Diëff), 1887, A., 353.
*per***Bromodithienyl** (Nahnsen), 1885, A., 51.
*hexa***Bromodithienyl***tri***chorethane** (Peter), 1884, A., 1001.
*di***Bromoditolyl,** product of the oxidation of (Carnelley and Thomson), 1885, T., 592; P., 88.
*di***Bromo-***p***-ditolyltetrazine** (Ruhemann), 1889, P., 168; 1890, T., 51.
Bromodurene (Gissmann), 1883, A., 334.
  action of sulphuric acid on (Jacobsen), 1888, A., 137.
*di***Bromodurene** (Jacobsen), 1888, A., 137.
*s-di***Bromethylene** (*acetylenic dibromide*), molecular refraction and dispersion of (Gladstone), 1891, T., 295.
*tri***Bromofluoran** (Meyer and Hoffmeyer), 1892, A., 970.
Bromofluorene (Hodgkinson and Matthews), 1883, T., 165.
*α-di***Bromofluorene,** and fusion of, with potash (Hodgkinson and Matthews), 1883, T., 164.
α - *di***Bromofluorenesulphonic acid** (Hodgkinson and Matthews), 1883, T., 172.
*tetra***Bromofluorescein.** See Eosin.
Bromoform (Günther), 1887, A., 787.
  preparation of (anon.), 1885, A., 463.
  preparation of, from acetone and sodium hypobromite (Denigès), 1892, A., 126.
  obtained in the manufacture of bromine (Dyson), 1883, T., 36.
  molecular refraction and dispersion of (Gladstone), 1891, T., 295.
  formation of acetylene from (Cazeneuve), 1892, A., 421.
  chloro- (Dyson), 1883, T., 636.
Bromoformberberine (Gaze), 1890, A., 1012.
Bromofulminuric acids (Ehrenberg), 1885, A., 1192.
Bromofumaric acid (v. Bandrowski), 1883, A., 313.
β-Bromofurfuran (Canzoneri and Oliveri), 1887, A., 658.
Bromofurfurans, *di-* and *tetra-* (Hill), 1883, A., 912.
*αα-di***Bromofurfuran-β-sulphonic acid** (Hill and Palmer), 1889, A., 386.
Bromofurfurylacrylic and **bromofurfurylbromacrylic acids** (Gibson and Kahnweiler), 1890, A., 960.
Bromofurfurylbromethylene and **bromofurfuryl***di***bromopropionic acid** (Gibson and Kahnweiler), 1890, A., 960.

_di_**Bromoglutaric acid** (Auwers and Bernhardi), 1891, A., 1191.

Bromoguanidine (Hirsch), 1888, A., 947.

Bromoguanine (Fischer and Reese), 1884, A., 467.

tri**Bromohemimellithene** (Jacobsen), 1887, A., 36.

Bromohemipinimide (Tust), 1892, A., 1210.

γ-Bromoheptoic acid (Fittig and Schmidt), 1890, A., 589.

γ-Bromo*iso*heptoic acid (Fittig and Zanner), 1890, A., 590.

Bromohexadecylene (Krafft and Reuter), 1892, A., 1163.

_di_**Bromohexahydrophthalic acid** (*trans*) (v. Baeyer), 1892, A., 1216.

_di_**Bromohexahydroterephthalic acid** (v. Baeyer), 1887, A., 370.

_di_**Bromohexoic acid,** decomposition of (Fittig and Hillert), 1892, A., 960.

_p-di_**Bromohomocuminic acid** (*dibromocumylacetic acid*), oxidation products of (Fileti and Basso), 1891, A., 105; (Fileti and Boniscontro), 1892, A., 604.

_di_**Bromohydrazinesulphonic acid** (Limpricht), 1889, A., 398.

Bromohydrazobenzene [m.p. 63°] (Janovsky and Erb), 1886, A., 1024.

_p-_**Bromohydrazobenzene** [m.p. 115°] (Janovsky and Erb), 1887, A., 479.

_di_**Bromohydrazobenzene** (Janovsky and Erb), 1887, A., 479.

_p-_**Bromohydrazobenzene-*o*-carboxylic acid** (Paal), 1892, A., 68.

Bromo-*p*-hydrazotoluene (Janovsky and Erb), 1887, A., 479.

_o-_**Bromohydrindone** (Miersch), 1892, A., 1222.

Bromohydrindones, *m*- and *p*- (v. Miller and Rohde), 1890, A., 1139.

_di_**Bromohydrindone** (Hausmann), 1889, A., 1173.

tetra**Bromohydrindone** (Roser and Haselhoff), 1888, A., 1304.

Bromohydrodicoumarin (Dyson), 1886, P., 250; 1887, T., 67.

_di_**Bromohydrolapachol** (Hooker), 1892, T., 643; P., 125.

Bromohydromuconic acid (v. Baeyer and Rupe), 1890, A. 876.

_di_**Bromo-*p*-hydroxybenzoic acid** (Balbiano), 1883, A., 1125.
  constitution of (Alessi), 1886, A., 65.

_p-_**Bromo-α-hydroxy-*n*- and -*iso*-butyric acids** (Kolbe), 1883, A., 573; (Melikoff), 1885, A., 650.

_di_**Bromohydroxycarboxytolylglyoxylic acid** (*dibromohydroxymethylbenzoyldicarboxylic acid*) (Will and Leymann), 1886, A., 253.

Bromohydroxycomenic acid (Ost), 1883, A., 792.

tri**Bromohydroxyconiine** (v. Hofmann), 1885, A., 563.

Bromohydroxycymene (Mazzara), 1886, A., 1017.

tri**Bromohydroxydiketodihydropentene** (Nef), 1890, A., 1272.

penta**Bromohydroxydiketohexene** (Zincke and Kegel), 1890, A., 1109.

5-**Bromo**-4-**hydroxy**-2:6-**dimethyl**-*m*-**diazine** (Pinner), 1887, A., 1054.

Bromo-ω-hydroxyethylpiperonylcarboxylic acid and anhydride (Perkin), 1890, T., 1025.

Bromohydroxyhydromuconic acid, lactone of (Ruhemann and Dufton), 1891, T., 753.

Bromohydroxyindone (Roser and Haselhoff), 1888, A., 1304; (Meldola and Hughes), 1890, T., 400; P., 58.
  benzylamide, hydrazone, hydrazone-hydrazide, and β-naphthylamide of (Meldola and Hughes), 1890, T., 403; P., 58.

Bromohydroxyketoindonaphthene (Zincke and Gerland), 1888, A., 1199, 1200.

_di_**Bromohydroxyketohydrindenecarboxylic acid** (Zincke and Gerland), 1888, A., 1199.

Bromohydroxy-β-methylcoumarilic acid (v. Pechmann and Cohen), 1884, A., 1332.

Bromohydroxy-β-methylcoumarone (v. Pechmann and Cohen), 1884, A., 1332.

5-**Bromo**-4-**hydroxy**-6-**methyl**-2-**ethyl**-*m*-**diazine** (Pinner), 1887, A., 1054.

Bromohydroxymethylhydrohydrastinine methiodide (Freund and Dormeyer), 1891, A., 1520.

$\beta_1\beta_1\gamma_1$-_tri_**Bromo-α_1-hydroxy-γ_1-methyljulolidine** (Reissert), 1892, A., 498.

β_1-**Bromo-α_1-hydroxy-γ_1-methyljuloline** (Reissert), 1892, A., 497.

Bromo-α_1-hydroxy-γ_1-methyljulolines, β_1-*mono*- and $\beta_1\gamma_1$-*di*- (Reissert), 1892, A., 497.

_di_**Bromohydroxymethylphthalic anhydride** (Will and Leymann), 1886, A., 253.

Bromohydroxy-α-naphthaquinone [m.p. 202°] (Miller), 1885, A., 667.

Bromohydroxy-α-naphthaquinone [m.p. 197°], action of hypochlorous and hypobromous acids on (Zincke and Gerland), 1888, A., 1198.

Bromohydroxy-α-naphthaquinoneoximide (Zincke and Gerland), 1887, A., 838.

*di***Bromohydroxynaphthaquinone** (Armstrong and Streatfeild), 1886, P., 232.

Bromo-β-hydroxypiperonylethyl methyl ketone (*bromopiperonyllactyl methyl ketone*) (Oelker), 1891, A., 1476.

γ-Bromo-α-hydroxy-γ-phenylbutyric acid (Biedermann), 1892, A., 471.

*di***Bromohydroxyphenylbutyronitrile** (Fischer and Stewart), 1892, A., 1447.

Bromohydroxyphenylcrotonic acid (Fischer and Stewart), 1892, A., 1447.

5-Bromo-4-hydroxy-2-phenyl-6-methyl-*m*-diazine (Pinner), 1887, A., 1053.

2:5-*di*Bromo-4-hydroxy*iso*propylbenzoic acid (Fileti and Boniscontro), 1892, A., 604.

*di***Bromohydroxypyridine** and its salts (Lieben and Haitinger), 1883, A., 871; (Koenigs and Geigy), 1884, A., 1195; (Fischer and Renouf), 1884, A., 1370.

Bromo-1-hydroxyquinoline [m.p. 119°] (Schmitt and Engelmann), 1888, A., 67.

4-Bromo-1-hydroxyquinoline [m.p. 124°] (Claus and Howitz), 1892, A., 354.

4:3-*di*Bromo-1-hydroxyquinoline (Claus and Posselt), 1890, A., 522; (Claus and Howitz), 1892, A., 354.

3:4:4′-*tri*Bromo-1-hydroxyquinoline (Srpek), 1890, A., 177; (Claus and Heermann), 1891, A., 83.

4-Bromo-3-hydroxyquinoline hydrobromide (Claus and Howitz), 1892, A., 353.

*di***Bromo-3-hydroxyquinoline** (Claus and Posselt), 1890, A., 523.

Bromo-2′-hydroxyquinoline. See Bromocarbostyril.

Bromo-1:4-hydroxyquinolinesulphonic acid (Claus and Posselt), 1890, A., 522.

*tri***Bromohydroxyquinone** (Barth and Schreder), 1885, A., 520.

Bromohydroxytetrahydronaphthoic acid, lactone of (v. Baeyer, Schoder and Besemfelder), 1892, A., 192.

Bromohydroxytetrahydroquinoline hydrochloride (Srpek), 1890, A., 177.

*di***Bromohydroxytrimethyluracil** (Hagen), 1888, A., 582.

*di***Bromoketoindonaphthene** (Roser), 1887, A., 729.

Bromo-α-keto-γ_1-methyl-β_1-ethyljuloline (Kayser and Reissert), 1892, A., 883.

Bromoketones, formation of, by the action of bromine on the alcohols of the ethyl series (Etard), 1892, A., 809.

Bromolapachol (Paternò), 1883, A., 211; (Hooker), 1892, T., 638; P., 125.

Bromolapachone (Hooker), 1892, T., 638; P., 125.

Bromolauric acid (Auwers and Bernhardi), 1891, A., 1190.

Bromolevulinic acids, α-*mono*- and αβ-*di*- (Wolff), 1891, A., 1187.

β-Bromolevulinic acid (Wolff), 1887, A., 464.

ββ-*di*Bromolevulinic acid (Wolff), 1891, A., 417.

*di***Bromolimettin** (Tilden), 1892, T., 348; P., 33.

Bromomaleic acid, action of aniline on (Michael), 1886, A., 698.

*di***Bromomaleic acid** (Ciamician and Silber), 1884, A., 1117.

Bromomaleic bromide (Hill and Sanger), 1884, A., 1305.

*di***Bromomaleinimide** (Ciamician and Silber), 1884, A., 1116; 1885, A., 993.

*di***Bromomaleinmethylimide** (de Varda), 1889, A., 57.

*di***Bromomalonamide** (Freund), 1884, A., 1124.

*di***Bromomalonic acid** (Massol), 1892, A., 1140.

Bromomercuric acid (Neumann), 1889, A., 1050.

Bromomesitol (Schramm), 1886, A., 451.

*di***Bromomesitylene** from coal-tar oil (Süssenguth), 1883, A., 469.

Bromomesitylenic acid, preparation of, from bromomesitylene (Süssenguth), 1883, A., 469.

*di***Bromomesitylenic acid**, and its salts (Süssenguth), 1883, A., 470.

Bromomesitylic bromide (Schramm), 1886, A., 451.

*di***Bromomethane.** See Methylenic bromide.

*di***Bromomethanesulphonic acid**, barium salt of (Andreasch), 1886, A., 786.

*di***Bromomethoxybenzoic acid** (Peratoner), 1887, A., 487.

*di***Bromomethoxymethylphthalic acid** (Will and Leymann), 1886, A., 254.

p-**Bromomethoxyphenylacetic acid** (Salkowski), 1889, A., 1174.

p-**Bromomethylaniline** (Meldola and Streatfeild), 1889, T., 418, 425, 433; P., 98.

Bromomethylchloroform (Henry), 1884, A., 978.

Bromomethylenephthalide (Gabriel), 1885, A., 165.

Bromo-*o*-methylethylbenzene (Claus and Pieszczek), 1887, A., 240.

Bromomethylethyloxazolone (Hanriot), 1891, A., 1108.

*di***Bromo-β-methylglutaric acid** (Auwers and Bernhardi), 1891, A., 1191.

*tri***Bromomethylglyoxaline** (Wallach), 1883, A., 911.

Bromomethylhydrohydrastinine (Freund and Dormeyer), 1892, A., 223.

Bromomethylisatoid (v. Baeyer and Oeconomides), 1883, A., 201.

Bromomethyloxindoles, *mono-* and *di-* (Colman), 1888, P., 96; 1889, T., 3, 7.

p-**Bromomethyl-α-phenotriazine** (Bischler and Brodsky), 1890, A., 152.

*di***Bromomethylpyridine** (Ladenburg), 1883, A., 672.

3-Bromo-1-methylquinoline, and its derivatives (Alt), 1889, A., 1214.

Bromo-2′- and -4′-methylquinolines (Magnanini), 1887, A., 1113; 1890, A., 1322.

Bromomethylquinolones (Decker), 1892, A., 879, 880, 881.

*di***Bromomethylsuccinic acid**, and its salts (Claus), 1883, A., 44.

Bromomethyltarconic acid (Roser), 1888, A., 1116.

ω-**Bromo-1:3:4-methyltetrahydropyridylethylene** (Eichengrün and Einhorn), 1891, A., 66.

3-Bromo-1-methyltetrahydroquinoline (Alt), 1889, A., 1214.

Bromomethylthiazolecarboxylic acid (Wohmann), 1891, A., 226.

*tri***Bromomethylthiophen** (*tribromothiolen*) (Meyer and Kreis), 1884, A., 1132.

γ-*tri***Bromomethylthiophen**, action of nitric acid on (Muhlert), 1885, A., 229.

*di***Bromo-β-methylthiophen** (Gerlach), 1892, A., 830.

*tri***Bromomethylthiophens**, oxidation of (Ciamician and Angeli), 1892, A., 302.

Bromomethyluracil (Behrend), 1886, A., 338.

Bromomimetites (Ditte), 1883, A., 783.

Bromomyristic acid (Hell and Twerdomedoff), 1889, A., 955.

*di***Bromomyristicin** (Semmler), 1890, A., 1150.

Bromonaphthalenes. See Naphthalene.

Bromonaphthalenesulphonic acid. See Naphthalenesulphonic acid.

Bromonaphthanilide (Miller), 1885, A., 667.

3′-**Bromo-1:2-naphthaquinol** (Claus and Philipson), 1891, A., 462.

Bromonaphthaquinone. See Naphthaquinone.

*di***Bromonaphthastyril** (Ekstrand), 1886, A., 715.

Bromo-α-naphthoic acid (Ekstrand), 1886, A., 715.

1:3′-*di***Bromo-2-naphthoic acid** (Claus and Philipson), 1891, A., 462.

Bromonaphthol. See Naphthol.

Bromonaphtholactone (Ekstrand), 1886, A., 716.

Bromo-β-naphthol-3′-sulphonic acid, derivatives of (Armstrong and Rossiter), 1889, P., 72.

1:3-*di***Bromo-2-naphthonitrile** (Claus and Philipson), 1891, A., 462.

Bromonaphthylamine. See Naphthylamine.

Bromonaphthylene-ethenylamidine (Prager), 1885, A., 1239.

*di***Bromo-α-naphthylpropionic acid** (Brandis), 1889, A., 1200.

Bromonicotinic acids (Claus and Collischonn), 1887, A., 159; (Srpek), 1890, A., 177; (Claus), 1892, A., 876.

Bromonitro-*p*-acetamido*iso*butylbenzene (Gelzer), 1889, A., 44.

Bromonitracetamidophenylacetonitrile (Gabriel), 1883, A., 64.

m-**Bromo-*p*-nitracetanilide** (Claus and Scheulen), 1891, A., 564.

3:5:4-*di***Bromonitracetanilide** (Claus and Weil), 1892, A., 1205.

Bromonitro-β-acetonaphthalide, preparation of (Prager), 1885, A., 1239.

Bromonitracetonaphthalides (Meldola), 1883, T., 9; 1885, T., 499.

ω-**Bromo-*o*-nitracetophenone** (Gevekoht), 1884, A., 445.

ω-**Bromo-*p*-nitracetophenone**, derivatives of (Engler and Zielke), 1889, A., 505.

5-Bromo-3-nitraceto-*o*-toluidide (Niementowski), 1892, A., 838; (Claus and Beck), 1892, A., 1207.

5-Bromo*di*nitraceto-*o*-toluidide (Niementowski), 1892, A., 838.

3-Bromo-5-nitraceto-*p*-toluidide (Hand), 1886, A., 1018.

Bromonitracetylpyrrolines, *mono-* and *di-* (Ciamician and Silber), 1887, A., 597; 1888, A., 61.
Bromo*di*nitro*tri*amidobenzene (Jackson and Bancroft), 1890, A., 982.
p-**Bromo**-*m*-**nitro**-*p*-**amidobenzophenone** (Schöpff), 1892, A., 336.
*eso***Bromonitramido***iso***butylbenzene** (Gelzer), 1889, A., 44.
Bromo-*o*- and *p*-**amidophenetoils**, *mono-* and *di-*, and their salts (Staedel), 1883, A., 663.
Bromonitramidophenylacetic acid (Gabriel), 1883, A., 64.
p-**Bromo**-*o*-**nitraniline** (Nölting and Collin), 1884, A., 1013.
m-**Bromo**-*p*-**nitraniline** (Claus and (Scheulen), 1891, A., 565.
3:5-*di***Bromo-4-nitraniline** (Claus and Weil), 1892, A., 1205.
Bromonitranisoil (Staedel), 1883, A., 662.
5:2-**Bromonitrazobenzene** (Willgerodt), 1888, A., 949.
*di***Bromonitrethane**, action of zinc ethyl on (Bewad), 1889, A., 1128.
β-**Bromo**-*m*-**nitrethylbenzamide** (Elfeldt), 1892, A., 213.
Bromonitrisatin (Dorsch), 1886, A., 360.
p-**Bromo**-*m*-**nitrobenzaldehyde** (Schöpff), 1892, A., 336.
p-**Bromo**-*m*-**nitrobenz-amide** and **-anilide** (Grohmann), 1891, A., 305.
Bromonitrobenzene. See Benzene.
1:3:6-**Bromonitrobenzenesulphonic acid** (Limpricht), 1885, A., 1234.
Bromonitrobenzoic acid. See Benzoic acid.
Bromonitrobenzonitrile. See Benzonitrile.
Bromo-*m*-**nitrobenzophenones**, *mono-* and *di-* (Schöpff), 1892, A., 336.
di-*p*-**Bromo***di*-*m*-**nitrobenzophenone** (Schöpff), 1892, A., 336.
Bromo*di*nitrobenzyl methyl ketone (Jackson and Moore), 1889, A., 781; 1890, A., 773.
Bromonitro-*p*-*iso*-**butyl-acetanilide** and **-aniline** (Gelzer), 1889, A., 44.
Bromonitrocamphor (Cazeneuve), 1885, A., 270.
α-**Bromo**-*m*-**nitrocinnamaldehyde** (Naar), 1891, A., 563.
α-**Bromo**-*o*-**nitrocinnamic acid** (Naar), 1891, A., 563.
α-**Bromo**-*m*-**nitrocinnamic acid** (Stuart), 1886, T., 361; (Naar), 1891, A., 564.
4:6-**Bromonitro**-*o*-**cresol** (Claus and Jackson), 1889, A., 128.
3:5:6-**Bromo*di*nitro-ψ-cumene** (Jacobsen), 1889, A., 39.
2:5-**Bromonitrocymene** (Fileti and Crosa), 1889, A., 493.
3-**Bromonitrocymene** (Mazzara), 1886, A., 1016; (Fileti and Crosa), 1889, A., 494.
3-**Bromo*di*nitrocymene** (Mazzara), 1886, A., 1016.
2-**Bromo*di*nitrocymene** (Fileti and Crosa), 1889, A., 493.
*di***Bromo*di*nitrocymenes** (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1200, 1201.
Bromonitrodiazo-. See Diazo-, under Azo.
*di***Bromo**-*mono-* and *tri*-**nitrodiphenyl** (Lellmann), 1883, A., 343.
p-**Bromo**-*o*-**nitrodiphenylsemithiocarbazide** (Bischler and Brodsky), 1890, A., 152.
*di***Bromo*di*nitro**-*p*-**dipropylbenzene** (Fileti), 1891, A., 1022.
Bromonitrohydroxyuracil (Behrend), 1887, A., 920.
Bromo*di*nitromesitylene (Süssenguth), 1883, A., 470.
Bromonitromethane, action of zinc ethyl on (Bewad), 1889, A., 1128.
Bromo*di*nitromethane (Kachler and Spitzer), 1883, A., 961.
*di***Bromo*di*nitromethane** (Losanitsch), 1884, A., 277.
  formation of (Losanitsch), 1883, A., 564.
  chlorine-derivatives of (Losanitsch), 1884, A., 1107.
6:2:4-**Bromo*di*nitromethylaniline** (Norton and Allen), 1885, A., 1214.
4′-**Bromo-4-nitro-1′-methylquinoline** (Claus and Decker), 1889, A., 728.
Bromonitronaphthalenes. See Naphthalene.
2:4:1-**Bromonitronaphthol** and its salts (Meldola), 1885, T., 501; P., 71.
Bromonitro-α-**naphthylamine** (Meldola), 1885, T., 500; P., 71; (Armstrong and Rossiter), 1891, P., 187.
Bromonitronaphthylene-ethenylamidine (Prager), 1885, A., 1239.
Bromonitrophenetoils (Staedel), 1883, A., 662.
*di***Bromonitrophenetoil** (Jackson and Bentley), 1892, A., 1182.
*tri***Bromo*di*nitrophenetoil** (Jackson and Warren), 1891, A., 1026.
Bromonitrophenols. See Phenol.
Bromonitrophenyl benzyl ethers (Roll and Hölz), 1885, A., 1209.

Bromo-*m*-nitrophenyl ethyl ether (*bromo-m-nitrophenetoil*) (Lindner), 1885, A., 775.
m-**Bromo*di*nitrophenylacetic acid** (Jackson and Robinson), 1890, A., 378.
p-**Bromo-*o*-nitrophenylhydrazine** (Bischler and Brodsky), 1890, A., 151.
3-Bromo-6-nitrophenylphenylhydrazine (Willgerodt), 1888, A., 949.
*tri***Bromonitropropane** (Askenasy and Meyer), 1892, A., 1064.
*tetra***Bromo-1:3-*di*nitropropane** (Keppler and Meyer), 1892, A., 1062.
Bromonitropropylene (Askenasy and Meyer), 1892, A., 1064.
Bromonitroquinolines, 2:2′- and 2:3′- (Claus and Vis), 1889, A., 281.
3:4-Bromonitroquinoline (La Coste), 1883, A., 90; (Claus and Zuschlag), 1890, A., 267.
1′-Bromonitroquinolines (Claus and Pollitz), 1890, A., 521.
Bromonitro*iso*quinoline, and its derivatives (Edinger and Bossung), 1891, A., 580.
Bromonitroquinones (Guareschi and Daccomo), 1885, A., 891.
Bromo*di*nitroresorcinol (Fèvre), 1883, A., 733; (Typke), 1883, A., 917.
*di***Bromonitroresorcinol** (Fèvre), 1883, A., 733.
Bromonitrosoazobenzene (Willgerodt), 1888, A., 949.
Bromonitrosocarvacrol, constitution of (Mazzara), 1890, A., 884.
di-*o*-**Bromonitrosophenol** (Fischer and Hepp), 1888, A., 456.
Bromonitrostrychnine (Beckurts), 1890, A., 1329.
*di***Bromonitroterephthalic acids** (Fileti and Crosa), 1891, A., 1056.
*di***Bromo*di*nitrothiophen** (Kreis), 1884, A., 1314.
Bromonitrothymol (Mazzara), 1890, A., 753.
o-**Bromo-*p*-nitrothymol** (Mazzara and Discalzo), 1886, A., 1019; (Mazzara), 1890, A., 366, 602.
3:6-Bromonitrotoluene (Bentley and Warren), 1890, A., 485.
*di***Bromo*di*nitrotoluene** [2:5:4:6] (Claus), 1888, A., 587.
*di***Bromo*tri*nitrotoluene** (Palmer), 1889, A., 390.
4:5-Bromonitro-*o*-toluic acid (Claus and Beck), 1892, A., 1207.
2:(?)-Bromonitro-*p*-toluic acid (Fileti and Crosa), 1887, A., 37.
Bromonitro-*p*-toluic acids, 2:3-, 2:5-, and 2:6- (Claus and Herbabny), 1892, A., 174.
3:6-Bromonitro-*p*-toluic acid (Fileti and Crosa), 1889, A., 495.
Bromonitro-*p*-toluic acids, 5:2- and 5:3- (Claus and Beysen), 1892, A., 178.
2:5-Bromonitro-*p*-toluidine (Claus and Herbabny), 1892, A., 174.
5:3-Bromonitro-*p*-toluidine (Hand), 1886, A., 1018.
2:6-Bromonitro-*p*-toluonitrile (Claus and Herbabny), 1892, A., 175.
Bromo*di*nitrotrianilidobenzene (Jackson and Bancroft), 1890, A., 982.
*di***Bromo-*di*- and -*tetra*-nitroxanilides** (Mixter and Willcox), 1888, A., 142.
3:4-*di*Bromo-5-nitro-*o*-xylene (Töhl), 1886, A., 57.
4:6-Bromonitro-*m*-xylene (Ahrens), 1892, A., 1437.
4-Bromo-2:6-*di*nitro-*m*-xylene (Lellmann and Just), 1891, A., 1245.
Bromonitro-*m*-xylenesulphonic acid and its salts (Limpricht), 1885, A., 1234.
Bromopianic acid (Tust), 1892, A., 1209.
Bromopianoximic anhydride (Tust), 1892, A., 1210.
Bromopianyl-hydrazobenzene, -phenylhydrazide, and -phenylmethylhydrazone (Tust), 1892, A., 1210.
α-**Bromopalmitic acid** (Hell and Iordanoff), 1891, A., 820.
Bromopentanes, *tri*- and *tetra*- (Hell and Wildermann), 1891, A., 162, 534.
Bromo-*o*- and -*p*-phenetidines, *mono*- and *di*-, and their salts (Staedel), 1883, A., 663.
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Bromophenol-*o*-sulphonic acid (Allain Lecanu), 1889, A., 1184.
p-**Bromo-*α*-phenotriazine** (Bischler and Brodsky), 1890, A., 152.
Bromophenylacetic acid, action of, on
  ethylic acetoacetate (Weltner), 1884, A., 746; 1885, A., 793.
  an apparent exception to the Le Bel-van't Hoff hypothesis (Easterfield), 1891, T., 71.
α-**Bromophenyl-*β*-amidocrotonic acid.** See *α*-Brom-*β*-anilidocrotonic acid.
*di***Bromophenylbenzoic acid.** See *di*-Bromodiphenylcarboxylic acid.
p-**Bromophenyl*tri*bromothiophen** (Kues and Paal), 1887, A., 239.
γγ-**Bromophenylbutyric acid** (Jayne), 1883, A., 472; (Fittig and Morris), 1890, A., 891.

- **Bromophenylbutyrolactone** (Fittig, Obermüller and Schiffer), 1892, A., 987.
- **Bromophenylcarbamide** (Bertram), 1892, A., 467.
- **Bromophenylcrotonic acid** (Körner), 1888, A., 368.
- **Bromophenylcysteine,** action of acetic anhydride on (Baumann), 1885, A., 514.
- *tri***Bromophenyldithienyl** (Renard), 1890, A., 1420.
- *tri***Bromophenylic benzoate** and its nitro-derivative (Daccomo), 1885, A., 890.
- *di***Bromophenylic carbonate** (Löwenberg), 1886, A., 789.
- **Bromophenyllactic acid** (Erlenmeyer), 1883, A., 196.
- **Bromophenyllactic acids,** optically active (Erlenmeyer), 1891, A., 1482.
- **Bromophenylmethylfurfuran** *tetra*bromide (Paal), 1885, A., 249.
- **Bromophenylmethylpyrazolone** (Möllenhoff), 1892, A., 1246.
- **Bromophenylmethylpyrazolones,** *mono-*, *di-*, and *tri-* (Knorr and Duden), 1892, A., 731.
- **Bromophenyloctane** (*bromoctylbenzene*) (Ahrens), 1887, A., 133.
- **Bromophenylparaconic acid** (Fittig and Leoni), 1890, A., 894.
- *az-p*-**Bromophenyl**-*ald*-**phenylnaphthotriazine** (Meldola and Forster), 1891, T., 690.
- 1-*p*-**Bromophenylpiperidine** (Lellmann and Just), 1891, A., 1244.
- *m*-**Bromo-β-phenylpropionic acid** (Gabriel), 1883, A., 195.
- **Bromophenylpropylene.** See Bromallylbenzene.
- **4-Bromo-1-phenylpyrazole** (Balbiano), 1890, A., 797.
- **Bromo-1-phenylpyrazoles,** *di-* and *tri-* (Balbiano), 1890, A., 797.
- **4-Bromo-1-phenylpyrazole-3:5-dicarboxylic acid** (Balbiano), 1890, A., 1165.
- *di***Bromo-2-phenylpyridinedicarboxylic acid** and its salts (Skraup and Cobenzl), 1883, A., 1014.
- *tri***Bromophenylsalicylic acid** (Arbenz), 1890, A., 893.
- *p*-**Bromophenylsuccinamic acid** (Hoogewerff and van Dorp), 1891, A., 196.
- *p*-**Bromophenylsuccinamide** (Hoogewerff and van Dorp), 1891, A., 196.
- *di***Bromophenylsulphonamic acid,** barium salt of (Traube), 1891, A., 569.
- **Bromophenyluramidopropionic acids,** *mono-*, *di-* and *tri-* (Hoogewerff and van Dorp), 1891, A., 198.
- γ-**Bromophenylvaleric acid** (Fittig and Stern), 1892, A., 988.
- **Bromophenyl***iso***valeric acid** (Fittig and Liebmann), 1890, A., 776.
- **Bromophenylvalerolactone** (Fittig and Stern), 1892, A., 987.
- *tri***Bromophloroglucinol** (Benedikt and Hazura), 1885, A., 554; (Herzig), 1886, A., 232.
  - action of potassium iodide on (Benedikt and v. Schmidt), 1883, A., 1119.
  - acetate (Zincke and Kegel), 1890, A., 1109.
- *hexa***Bromophloroglucinol** *di*bromide (Hazura and Benedikt), 1886, A., 52.
- **Bromophthalic acids and anhydride.** See Phthalic acid and anhydride.
- **Bromophthalide** (Racine), 1886, A., 549.
- *di***Bromophthalide** (Guareschi), 1884, A., 842.
- *di***Bromo**-*o*-**phthalimide** (Le Blanc), 1889, A., 257.
- **Bromopiperonal,** derivatives of (Oelker), 1891, A., 1474.
- **Bromopiperonaldoxime** (Oelker), 1891, A., 1475.
- **Bromopiperonylacrylic acids,** *tri-* and *tetra-* (Perkin), 1891, T., 160, 163; P., 27.
- *tri***Bromopiperonylethylene** (Perkin), 1891, T., 161; P., 27.
- **Bromopiperonylpropionic acid** (Weinstein), 1885, A., 665.
- *di***Bromopiperonylvaleric acid** (*dibromopiperhydronic acid*), and derivatives of (Weinstein), 1885, A., 664.
- **Bromopiperonylvinyl methyl ketone** (Oelker), 1891, A., 1475.
- **Bromoprehnitene,** action of sulphuric acid on (Töhl), 1892, A., 968.
- β-**Bromopropaldehyde** (Lederer), 1891, A., 37.
- *di***Bromopropaldehyde** (Etard), 1892, A., 809.
- *tri***Bromopropaldehyde** (Niemilowicz), 1890, A., 861.
- 1:2:3-*tri***Bromopropane.** See Tribromhydrin.
- *tetra***Bromopropane** (*isoallylene tetrabromide*) (Gustavson and Demjanoff), 1889, A., 30.
- **Bromopropiolic acid,** action of aromatic amines on (Mabery and Krause), 1890, A., 371.
- **Bromopropionic acids.** See Propionic acid.
- **Bromopropylamines.** See Propylamine.
- γ-**Bromopropylaminenitrobenzamide** (Elfeldt), 1892, A., 214.

*di*Bromopropyl*iso*amylamine and its hydrobromide (Paal), 1889, A., 118.

Bromopropylbenzamides, β- and γ- (Hirsch), 1890, A., 860; (Gabriel and Elfeldt), 1892, A., 212.

*di***Bromopropyl-*n*- and -*iso*-butylamines** (Paal), 1889, A., 117.

*di***Bromopropylcarbamide** and its derivatives (Andreasch), 1884, A., 732; (Paal and Heupel), 1892, A., 30; (Paal), 1892, A., 578.

Bromopropylcinnamoylamides, β- and γ- (Elfeldt), 1892, A., 215.

*di***Bromopropylene** (Lespieau), 1892, A., 420.

α-**Bromo-*n*- and -*iso*-propylenes** (Wislicenus, Teisler and Langbein), 1889, A., 236.

Bromopropylenecarbamide and its derivatives (Andreasch), 1884, A., 733; (Paal), 1892, A., 578.

*di***Bromopropylic acetates**, α- and αβ- (Aschan), 1890, A., 1084.

β-**Bromopropyl-*m*-nitrobenzamide** (Elfeldt), 1892, A., 213.

β-**Bromopropylphthalimide** (Seitz), 1891, A., 1472.

γ-**Bromopropylphthalimide** (Gabriel and Weiner), 1888, A., 1292.

Bromopropylthiocarbamide (Lauer), 1890, A., 1090.

Bromopropylthiophen (Rufi), 1887, A., 804.

p-*di***Bromopropyltoluic acid**, oxidation products of (Fileti and Boniscontro), 1892, A., 604.

*tri***Bromopropyl-*o*-xylene** (Uhlhorn), 1890, A., 1249.

2-**Bromopyridine** (v. Hofmann), 1883, A., 813; (Ciamician and Silber), 1885, A., 811.

*di***Bromopyridine** (Koenigs and Geigy), 1884, A., 1195; (Blau), 1889, A., 1212.

Bromopyridine-2:3-dicarboxylic acid (Claus and Collischonn), 1887, A., 159.

Bromopyridine-3:4-dicarboxylic acid (Edinger and Bossung), 1891, A., 580.

3:5-*di***Bromopyridine-2:4:6-tricarboxylic acid** (Pfeiffer), 1887, A., 844.

*tetra***Bromopyrocoll** (Ciamician and Silber), 1884, A., 292.

Bromopyrocresole oxides (Schwarz), 1883, A., 207.

*tri***Bromopyrogallol** (Webster), 1884, T., 205, 207.

Bromopyromucic acids, *mono*- and *di*- (Hill and Sanger), 1884, A., 1305; (Canzoneri and Oliveri), 1885, A., 244, 1125; (Hill), 1885, A., 1125.

Bromopyrotritaric acid (Dietrich and Paal), 1887, A., 658.

*di***Bromopyrrolinephthalide** (Anderlini), 1889, A., 58.

*tri***Bromopyrryl-1-methylglyoxylic acid** (de Varda), 1890, A., 390.

*di***Bromopyruvic acid**, action of hydroxylamine on (Söderbaum), 1892, A., 815.
  compounds of, with hydrazines (Nastvogel), 1889, A., 237.

*di***Bromo-pyvuramide** and **-pyvureide** (Fischer), 1887, A., 918.

*tri***Bromopyvurine** (Fischer), 1887, A., 918.

Bromoquinol, dimethyl ether of (Nölting and Werner), 1891, A., 209.

m-*di***Bromoquinol** (Ling), 1892, T., 562; P., 105.

*di***Bromoquinoldicarboxylic acid** (Böniger), 1888, A., 954.

*di***Bromoquinoldisulphonic acid** (Graebe and Weltner), 1891, A., 1029.

1-**Bromoquinoline-4-carboxylic acid** (Lellmann and Alt), 1887, A., 502.

Bromoquinoline. See Quinoline.

Bromoquinolinesulphonic acid. See Quinolinesulphonic acid.

Bromoquinolinesulphonic bromide (Claus and Posselt), 1890, A., 522.

Bromoquinolinic acid (Srpek), 1890, A., 177.

m-*di***Bromoquinone** (Heinichen), 1890, A., 165; (Ling), 1892, T., 561; P., 105.

*tetra***Bromoquinone** (*bromanil*) (Ling), 1887, T., 148; (Graebe and Weltner), 1891, A., 1028.

*tetra***Bromo-*o*-quinone** (Zincke), 1887, A., 808.

*di***Bromoquinone-chlor-** and **-phenolimides** (Möhlau), 1884, A., 594.

*di***Bromorcinol**, diethyl ether of (Herzig and Zeisel), 1890, A., 1405.

Brom-α-orcinoldichroin (Brunner and Chuit), 1888, A., 1183.

Bromoresorcinols, *mono*- and *di*- (Zehenter), 1887, A., 924.

Bromorosindone (Fischer and Hepp), 1891, A., 1045.

*di***Bromosalicylamide** (Spilker), 1890, A., 141.

Bromosalicylic acids, substituted (Peratoner), 1887, A., 486.

*di***Bromosalicylic acid**, constitution of (Peratoner), 1887, A., 487.

*di***Bromosalicylthiamide** (Spilker), 1890, A., 142.

Bromosarcosinemesouric acid (Mylius), 1884, A., 1128.

*di*Bromosebacic acid, and its derivatives (Claus and Steinkauler), 1888, A., 133; (Auwers and Bernhardi), 1891, A., 1191.
Bromoshikimolactone (Eijkman), 1891, A., 920.
Bromostannic acid (Preis and Raýman), 1883, A., 425; (Seubert and Schürmann), 1887, A., 554.
Bromostearic acid (Piotrowski), 1890, A., 1396.
α-Bromostearic acid (Hell and Sadomsky), 1891, A., 1336.
Bromostrychnine (Shenstone), 1885, T., 140, 141; P., 5; (Beckurts), 1885, A., 675, 911; (Loebisch and Schoop), 1886, A., 268.
 crystallography of (Miers), 1885, T., 144; P., 5.
 action of nitric acid on (Shenstone), 1885, T., 141; P., 5.
 methhydroxide and methiodide (Beckurts), 1890, A., 1329.
 physiological action of (Brunton), 1885, T., 143; P., 5.
*di*Bromostrychnine (Shenstone), 1885, T., 141; P., 5; (Beckurts), 1885, A., 675, 911.
*tri*Bromostrychnine (Beckurts), 1885, A., 675, 911.
p-Bromostyrene *di*bromide (Schramm), 1891, A., 898.
 glycol (Schramm), 1891, A., 898.
*di*Bromostyrene, action of bromine-vapour on (Kinnicutt and Palmer), 1884, A., 603.
*di*Bromosuccinanil (Anschütz and Wirtz), 1887, A., 934.
Bromosuccinic acids. See Succinic acid.
Bromosuccinimide (Kusserow), 1889, A., 1064.
o-Bromo-*m*-sulphobenzoic acid (Fischer), 1892, A., 333.
δ-Bromo-β-sulphopyromucic acid (Hill and Palmer), 1889, A., 386.
2-Bromoterephthalic acid (Schultz), 1885, A., 1054; (Fileti), 1887, A., 52.
*di*Bromotetracetylbrazilein (Schall and Dralle), 1890, A., 997.
Bromotetrahydrodiphenylic *di*bromide (Bamberger and Lodter), 1888, A., 604.
*tri*Bromotetraketohexamethylene (Landolt), 1892, A., 836.
*tetra*Bromotetraketohexamethylene (Nef), 1890, A., 1272.
*hexa*Bromotetramethylene (Sabanéeff), 1889, A., 1128.
Bromotetramethylenecarboxylic acid (Perkin and Sinclair), 1891, P., 191; 1892, T., 41.
Bromo-α-tetraresorcinoldichroin ether (Brunner and Chuit), 1888, A., 1182.
Bromotetrethylphloroglucinols (Herzig and Zeisel), 1890, A., 243.
Bromotetric acid (Moscheles and Cornelius), 1888, A., 1272.
μ-Bromothiazole (Schatzmann), 1891, A., 745.
Bromothiophen (Schleicher), 1886, A., 227.
*di*Bromothiophen, direct preparation of, from coal-tar benzene (Meyer and Stadler), 1885, A., 971.
*tri*Bromothiophen, and its sulphonic acid and anhydride (Rosenberg), 1885, A., 1051.
*tetra*Bromothiophen, oxidation of (Ciamician and Angeli), 1892, A., 302.
Bromothiophen-3-carboxylic acid (Gattermann and Römer), 1886, A., 537.
Bromothiophen-2:3-dicarboxylic acid (Gerlach), 1892, A., 831.
Bromothiotolen. See Bromomethylthiophen.
2-Bromothymol (Claus and Krause), 1891, A., 899, 900.
6-Bromothymol, derivatives of (Mazzara), 1890, A., 366.
o-Bromothymol, ethyl ether of (Mazzara and Vighi), 1890, A., 883.
6-Bromothymol methyl ether (Mazzara), 1890, A., 366.
Bromothymol-*o*- and *p*-sulphonic acids, *o*- and *p*- (Claus and Krause), 1891, A., 899.
β-Bromothymoquinol (Mazzara and Discalzo), 1886, A., 1020; (Schniter), 1887, A., 720.
2-Bromothymoquinone (Mazzara), 1890, A., 753; (Claus and Krause), 1891, A., 899.
5-Bromothymoquinones (Schniter), 1887, A., 720; (Mazzara), 1890, A., 753.
Bromothymoquinones, 2- and 5- (Kehrmann), 1890, A., 367.
Bromotoluene. See Toluene.
Bromotoluenesulphonic acids. See Toluenesulphonic acids.
Bromotoluic acid. See Toluic acid.
m-Bromo-*o*-toluidine (Alt), 1889, A., 1214.
p-Bromo-*m*-toluidine (Claus), 1892, A., 1201.
2:6-*di*Bromo-*p*-toluidine (Claus and Herbabny), 1892, A., 175.
m-Bromo-*o*-toluidine-*m*-sulphonic acid (Wynne), 1892, T., 1037; P., 155.
Bromo-*o*-toluonitrile (Nourrisson), 1887, A., 668.

4:6-*di*Bromo-*o*-toluonitrile (CLAUS and BECK), 1892, A., 1208.

2:6-*di*Bromo-*p*-toluonitrile (CLAUS and HERBABNY), 1892, A., 175.

3:5-*di*Bromo-*p*-toluonitrile (CLAUS and SEIBERT), 1892, A., 176.

Bromotoluphenanthrazine (HARTMANN), 1890, A., 976.

3-**Bromotoluquinone** (CLAUS and JACKSON), 1889, A., 128.

4-**Bromotoluquinone** (SCHNITER), 1887, A., 1036.

Bromotoluquinones, *di*- and *tri*- (CANZONERI and SPICA), 1883, A., 330.

*tri***Bromotoluquinone**, action of potassium hydroxide on (SPICA and MAGNANIMI), 1884, A., 175.

Bromotolyl methyl ketone, *o*- and *m*- (CLAUS), 1891, A., 911.

p-**Bromo**-*m*-**tolyl methyl ketone** (SCHÖPFF), 1892, A., 338; (CLAUS), 1892, A., 1200.

p-**Bromo**-*m*-**tolyl methyl ketoxime** (CLAUS), 1892, A., 1201.

*di***Bromo**-*o*- and -*p*-**tolyl**-α-**amidopropionitrile** (STEPHAN), 1887, A., 143.

β-*di***Bromotolylbenzoic acid** (CARNELLEY and THOMSON), 1886, P., 258; 1887, T., 90.

5-**Bromo**-3:4-**tolylenediamine** (BISTRZYCKI), 1890, A., 970.

Bromotolylenecarbamide (HARTMANN), 1890, A. 975.

*di***Bromo**-*p*-**tolylic benzoate** (SCHALL and DRALLE), 1885, A., 146.

*di***Bromotricarballylic acid** (GUINOCHET), 1890, A., 594.

*di***Bromotriethylgallic acid** (SCHIFFER), 1892, A., 715.

Bromotrihydroxybenzophenone (GRAEBE and EICHENGRÜN), 1892, A., 1225.

*hexa***Bromotriketohexamethylene** (ZINCKE and KEGEL), 1890, A., 1109.

*di***Bromotriketohydronaphthalene hydrate** (ZINCKE and GERLAND), 1888, A., 291.

*di***Bromotriketopentamethylene hydrate** (LANDOLT), 1892, A., 836.

*tri***Bromotriketopentamethylene** (HANTZSCH), 1888, A., 1191, 1192; (LANDOLT), 1892, A., 836.

Bromotrimethylcarbinol (*bromo-tert.-butyl alcohol*) (GUARESCHI and GARZINO), 1888, A., 437; (GARZINO), 1889, A., 951.

Bromotrimethylenedisulphone sulphides, *di*- and *hexa*- (CAMPS), 1892, A., 593.

*hexa***Bromotrimethylenetrisulphone** (CAMPS), 1892, A., 592.

Bromotrimethylethylammonium salts, *di*- and *tri*- (BODE), 1892, A., 806.

α-**Bromotrimethylglutaric anhydride** (AUWERS and MEYER), 1890, A., 480.

*di***Bromo**-2:4:6-**trimethylpyridine** (PFEIFFER), 1887, A., 844.

Bromotrimethylvinylammonium salts (BODE), 1892, A., 807.

*tri***Bromotriphenylfurfuran** (JAPP and KLINGEMANN), 1890, T., 713.

Bromotriphenylmethane, action of, on ethyl sodomalonate (HENDERSON), 1887, T., 224.
- reactions of (ELBS), 1884, A., 1030.

Bromotriphenylmethylpyrrolone, crystallography of (TUTTON), 1890, T., 728.

*tri***Bromotrithienyl** (RENARD), 1891, A., 428.

*tri***Bromotritolylbenzene** (CLAUS), 1890, A., 770.

Bromumbelliferones, *mono*- and *di*-, ethyl and methyl ethers of (WILL and BECK), 1886, A., 881, 882.

Bromoundecylenic acid (BRUNNER), 1886, A., 1011.

Bromouracilcarboxylic acids (BEHREND), 1887, A., 920.

*di***Bromovaleraldehyde** (LIEBEN and ZEISEL), 1886, A., 783.

Bromovaleric acid, decomposition of (FITTIG and URBAN), 1892, A., 960.

*di***Bromovaleric acid** (*dibromallylacetic acid*) (OTT), 1891, A., 1453.

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α-**Bromo***iso***valeric acid** (VOLHARD), 1888, A., 129; (SCHLEICHER), 1892, A., 427.

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- *d*-**Mannoheptose** (Fischer), 1890, A., 598; (Fischer and Passmore), 1890, A., 1230.
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- **Carbonylsulphamyl**, chloro- (Schöne), 1885, A., 512.
- **Carbonylthiocarbanilide**, thio- (Freund and Wolf), 1892, A., 983.
- **Carbonyl-*p*-tolylphenylthiocarbamide** (Freund and Wolf), 1892, A., 984.

Carbonyltriphenylenediamine, *di*thio- (Gucci), 1885, A., 156.

Carbonyltriphenylguanidine, and its hydrochloride and nitrate (v. Stojentin), 1885, A., 1196.

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*iso***Carbopyrotritaric acid** (*isodimethylfurfurandicarboxylic acid*) (Knorr), 1889, A., 385.

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Carbopyrrylglyoxylic acid (*pyrroline ketonedicarboxylic acid*) (Ciamician and Silber), 1886, A., 719, 938.

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Carbosilicon compounds (Colson), 1883, A., 15; (Schützenberger), 1892, A., 1050.

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  derivatives of (Friedländer and Weinberg), 1885, A., 989; (Feer and Koenigs), 1885, A., 1235.

Carbostyril 4′-amido- (Friedländer and Lazarus), 1885, A., 1139.
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  4′-bromo- (Friedländer and Weinberg), 1883, A., 351.
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  3′-chloro- (Friedländer and Weinberg), 1883, A., 351.
  4′-halogen derivatives of (v. Baeyer and Bloem), 1883, A., 196.
  1-nitro- (v. Miller and Kinkelin), 1889, A., 990.
  2′-, 3′-, and 4′- nitro- (Friedländer and Lazarus), 1885, A., 1139.

*iso***Carbostyril** (Bamberger and Kitschelt), 1892, A., 882.

*iso***Carbostyril** derivatives (Friedländer and Weinberg), 1885, A., 989; (Friedländer and Müller), 1887, A., 977.

Carbostyrilcarboxylic acid (Friedländer and Göhring), 1884, A., 1020.

*iso***Carbostyrilcarboxylic acid** (Bamberger and Kitschelt), 1892, A., 882; (Zincke), 1892, A., 970.

Carbostyrilsulphonic acid (La Coste and Valeur), 1886, A., 629; 1887, A., 379.

Carbothiamidocyanobenzoyl (Griess), 1885, A., 1226.

Carbo*tri*thiohexabromide, and formation of a new colouring matter by the action of heat on (Hell and Urech), 1883, A., 907.

Carbo-*p*-toluidobenz-*anti*- and -*syn*-aldoximes (Goldschmidt and Zanoli), 1892, A., 1435.

Carbo-*p*-toluidofurfur*syn*aldoxime (Goldschmidt and Zanoli), 1892, A., 1434.

Carbo-*o*-toluidothiophen*syn*aldoxime (Goldschmidt and Zanoli), 1892, A., 1436.

Carbo-*o*-tolylene-diphenyltetramine and **-di-*p*-tolyltetramine** (Dahm and Gasiorowski), 1887, A., 247.

Carbotolylphenylimide (Huhn), 1886, A., 1035.

Carbovaleraldine, oxidation of (Guareschi), 1884, A., 294.

Carbovalerolactonic acid (Hjelt), 1883, A., 456.

Carboxyamidocarbimidamidobenzoic acid and **carboxyamidocyanamidobenzoyl** (Griess), 1885, A., 1225.

o-**Carboxyanilidoacetic acid** (*phenylglycin-o-carboxylic acid* (Mauthner and Suida), 1889, A., 143.

p-**Carboxyanilidoacetic acid** (Mauthner and Suida), 1891, A., 39.

Carboxybenzylmethylglutaric acid (Bischoff and v. Kuhlberg), 1890, A., 1135.

m-**Carboxybenzylphthalamic acid** (Reinglass), 1891, A., 1345.

p-**Carboxybenzylphthalamic acid** (Günther), 1890, A., 977.

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β-**Carboxycinchomeric acid.** See Pyridine-3:4:5-tricarboxylic acid.

α-**Carboxy*iso*cinchomeronic acid.** See Pyridine-2:3:6-tricarboxylic acid.

o-**Carboxycinnamic acid,** oxidation of β-naphthol to (Ehrlich and Benedikt), 1888, A., 1306.

o-**Carboxycinnamic acid,** oxidation of (Ehrlich), 1890, A., 54.
p-**Carboxycinnamic acid,** and its derivatives (Löw), 1885, A., 799.
o-**Carboxycinnamyl***di***thiocarbamic acid** (Rothschild), 1890, A., 1123; 1891, A., 199.
Carboxy-2:5-dimethyl-3:4-pyrrolylacetic acid (Knorr), 1886, A., 332.
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Carboxyethyl-*o***-amidobenzamide** (*ethylic carbamylphenyl carbamate*) (Abt), 1889, A., 610.
Carboxygalactonic acid (Kiliani), 1889, A., 589.
Carboxyglutaric acid (*propanetricarboxylic acid*) (Emery), 1891, A., 547.
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α-**Carboxy-β-naphthylphosphoric acid** (Rabe), 1889, A., 514.
α-**Carboxynaphthyl***ortho***phosphoric acid** (Wolffenstein), 1888, A., 714.
α-**Carboxynaphthyl***ortho***phosphoric** *penta***chloride,** chloro- (Wolffenstein), 1887, A., 963.
o-**Carboxyphenylacetic acid** (*phenylacetic-o-carboxylic acid, homophthalic acid, isouvitic acid*) (Wislicenus), 1885, A., 532; 1886, A., 880; (Schreder), 1885, A., 798; (Le Blanc), 1889, A., 256.
  constitution of (Schreder), 1885, A., 798.
  salts of (Wislicenus), 1885, A., 532.
  amic acid of (*homo-o-phthalaminic acid*) (Gabriel), 1887, A., 726.
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  anhydride of (Wislicenus), 1885, A., 532.
o-**Carboxyphenylacetic acid** (*phenylacetic-o-carboxylic acid, homophthalic acid, isouvitic acid*), benzylimide of (Pulvermacher), 1887, A., 1111.
  imide and methylimide of (Gabriel), 1887, A., 50.
p-**Carboxyphenylacetic acid** (*homoterephthalic acid*), and its derivatives (Mellinghoff), 1890, A., 240; (Fileti and Basso), 1891, A., 1057.
  amide and amic acid of (Mellinghoff), 1890, A., 240.
o-**Carboxyphenylacetonitrile** (*homophthalonitrile*) (Glock), 1888, A., 1291.
o-**Carboxyphenylacetopropylimide** (Le Blanc), 1889, A., 256.
o-**Carboxyphenylbenzylacetamide** (*α-benzylhomophthalamide*) (Eichelbaum), 1888, A., 1300.
o-**Carboxyphenylbenzylacetic acid,** and its imide (Eichelbaum), 1888, A., 1301.
o-**Carboxyphenylbenzylacetonitrile** (Eichelbaum), 1888, A., 1300.
o-**Carboxyphenylglyceric acid,** δ-lactone of (Bamberger and Kitschelt), 1892, A., 857.
o-**Carboxyphenylglyoxylic acid** (Scherks), 1885, A., 533.
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  amido- (Griess), 1885, A., 1225; 1888, A., 827.
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Carboxyphenyl*ortho***phosphoric acid,** *tri*chlorides, *m*- and *p*- (Anschütz and Moore), 1887, A., 947.
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o-**Carboxyphenylpropionic acid,** phenylhydrazine derivative of (Roser), 1885, A., 797.
p-**Carboxy-β-phenylpropionic acid** and its derivatives (Widman), 1889, A., 1181.
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Carboxyphenyltartridic acid (Schiff), 1886, A., 622.

α-**Carboxypimelic acid** (Schleicher), 1892, A., 428.

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Carboxytriphenylenediamine, *di*thio- (Gucci), 1886, A., 1024.

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Cardamom oil. See Oil.

Carica Papaya, alkaloid from (Greshoff), 1891, A., 334.
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Carnallite, a cheap substitute for kainite (Troschke), 1884, A., 868.
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Carnauba wax, chemical composition of (Stürcke), 1884, A., 1280.

Carnine (Krukenberg and Wagner), 1885, A., 674, 920.

Carpaine, the alkaloid of *Carica Papaya* (Greshoff), 1891, A., 334.

Carragheen moss, galactose from (Haedicke, Bauer and Tollens), 1887, A., 791.

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p-**Carvacrotic acid** (Lustig), 1886, A., 346.

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Carvacryl *mono-* and *di*-potassium phosphates (Heymann and Koenigs), 1887, A., 241.

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*iso***Carvoxime** (Goldschmidt and Kisser), 1887, A., 923.

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  preparation of (Ringer), 1891, A., 341.
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p-**Chlorobenzoic sulphinide** (de Roode), 1891, A., 1227.

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*penta***Chlorobenzonitrile** (Merz and Weith), 1884, A., 589.

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*di***Chlorobrassidic acid** (Holt), 1892, A., 429, 1427.

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*di***Chlorobromacetyl***penta***chlorobutyric acid** (Zincke and Rabinowitsch), 1891, A., 691.

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ψ-Chlorobromocarbostyril (Decker), 1892, A., 630.

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***p*-Chlorobromophthalide** (Guareschi and Biginelli), 1887, A., 1114.

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Chlorobromoterephthalic acid (Willgerodt and Wolfien), 1889, A., 966.

***di*Chloro*di*bromotetrahydroxydiphenyl** (Benedikt), 1883, A., 985.

***di*Chloro*di*bromotetraketohexamethylene** (Nef), 1890, A., 1271.

α-Chloro-*p*-bromothymoquinol (Schniter), 1887, A., 720.

Chlorobromotoluenes (Willgerodt and Salzmann), 1889, A., 986.

Chlorobromo-*p*-toluic acid (Willgerodt and Wolfien), 1889, A., 966.

2-Chloro-5-bromo-*p*-toluic acid (Claus and Davidsen), 1892, A., 173.

4-Chloro-5-bromo-*m*-xylene and **4:5-*di*chloro-3-bromo-*m*-xylene** (Claus and Groneweg), 1891, A., 921.

2:4-*di*Chloro-5:6-*di*bromo-*m*-xylene (Koch), 1890, A., 1248.

Chlorobromo-*p*-xylenes, and their derivatives (Willgerodt and Wolfien), 1889, A., 965.

***di*Chlorobrucine** (Beckurts), 1890, A., 1330.

αγ-*di*Chlorobutaldehyde (Natterer), 1883, A., 965.

***tri*Chlorobutaldehyde** (Natterer), 1883, A., 966.
  See also Butylchloral.

Chloro*iso*butaldehyde (Brochet), 1892, A., 1292.

***tetra*Chloro*iso*butane** (Willgerodt and Dürr), 1887, A., 570.

***penta*Chlorobutinenecarboxylamide** (*pentachloropentolamide*) (Zincke and Küster), 1890, A., 1257.

***penta*Chlorobutinenecarboxylic acid** (Zincke and Küster), 1888, A., 1278.

Chlorobutyl derivatives, normal and primary (Henry), 1886, A., 215.

δ-Chlorobutylamine (Gabriel), 1892, A., 131.

Chloro*iso*butylamines, *mono-* and *di-* (Berg), 1892, A., 1172.

***p*-Chloro*iso*butylbenzene** (v. Dobrzycki), 1888, A., 369.

Chloro*iso*butylene (Scheschukoff), 1884, A., 1276.

***di*Chloro-ψ-butylenic *di*bromide** (Newbury), 1884, A., 295.

Chlorobutylglyoxaline (*chloroxalamyline*) (Wallach), 1883, A., 50.

***tri*Chlorobutylic** alcohol, action and fate of, in the animal organism (Külz), 1885, A., 283.
  chloride, tertiary (Willgerodt and Dürr), 1887, A., 570.
  oxide, tertiary (Willgerodt and Dürr), 1887, A., 570.

***per*Chlorobutylic *per*chlorosebacate** (Gehring), 1887, A., 801.

γ-Chlorobutyramide (Henry), 1886, A., 216.

α-*di*Chlorobutyranilide (Rügheimer and Schramm), 1888, A., 502.

Chlorobutyric acids. See Butyric acids.

γ-Chlorobutyric chloride (Henry), 1886, A., 216.

αβ-*di*Chlorobutyric chloride (Zeisel), 1886, A., 1007.

Chlorobutyrimidoether hydrochloride (Pinner), 1884, A., 1292.

γ-Chlorobutyronitrile (Henry), 1886, A., 215; (Gabriel), 1890, A., 1221.

Chlorocaffeine (Fischer and Reese), 1884, A., 466.

Chlorocamphor. See Camphor.

Chlorocamphorsulphonic acids, α- and β-, salts of (Marsh and Cousins), 1891, T., 978.

α-Chlorocamphorsulphonic chloride (Marsh and Cousins), 1891, T., 978.

Chlorocamphoryl chloride (Marsh), 1890, A., 995.

Chlorocarbonylsulphamyl (Schöne), 1885, A., 512.

***p*-Chlorocarbostyril** (*p-chloro-2′-oxyquinoline*) (Einhorn and Lauch), 1888, A., 501.

β-Chlorocarbostyril (Friedländer and Weinberg), 1883, A., 351.

Chloro-ψ-carbostyril (Einhorn and Lauch), 1888, A., 501.

Chlorocellulose, formation of, electrochemically (Goppelsroeder), 1885, A., 208.

***di*Chlorocinchonine** (Comstock and Koenigs), 1892, A., 1011.

α-Chlorocinnam-aldehyde and **-aldoxime** (Naar), 1891, A., 562.

Chlorocinnamic acid. See Cinnamic acid.

Chlorocinnoline (Busch and Klett), 1892, A., 1494.

***tri*Chlorocitrazinimide**, compound of with aniline (Ruhemann), 1888, A., 728.

Chlorocitryl chloride, constitution of (Skinner and Ruhemann), 1889, T., 240.
  action of aniline and toluidine, of heat and of water on (Skinner and Ruhemann), 1889, T., 236.

***di*Chlorocomanic acid** (Ost), 1885, A., 49.

Chlorocoumarone (Kraemer and Spilker), 1890, A., 496.

Chlorocresol. See Cresol.

Chlorocrotonaldehyde. See Crotonaldehyde.

***di*Chlorocrotonaldoxime** (Schiff and Tarugi), 1892, A., 34.

Chlorocrotonic acids. See Crotonic acids.

Chlorocrotonylcarbamide (Pinner and Lifschütz), 1887, A., 1032.

Chlorocruorine (Griffiths), 1892, A., 1256.

Chloroctylbenzene (Ahrens), 1887, A., 133.

Chloro-*n*-cumene (*chloropropylbenzene*) (Errera), 1887, A., 35.

Chloro-ψ-cumene (Wallach and Heusler), 1888, A., 362.

o-**Chlorocumylacrylic acid** (Widman), 1891, A., 69.

o-**Chlorocumylpropionic acid** (Widman), 1891, A., 69.

Chlorocyanic acid (Bellmann), 1884, A., 840.

Chlorocyanuric iodide (Klason), 1886, A., 1001.

Chlorocymene. See Cymene.

Chlorocymenesulphonic acid (Carrara), 1890, A., 779.

6-Chlorocymene-2-sulphonic acid (Errera), 1890, A., 1288.

*tri*Chloro-*m*-*iso*cymene-6-sulphonic acid, and its sodium salt (Kelbe), 1883, A., 806.

Chlorodecane from American petroleum (Lemoine), 1884, A., 1107.

Chlorodecylic benzoate (Grosjean), 1892, A., 691.

Chlorodehydrobenzoylacetic acid, preparation and properties of (Perkin), 1885, T., 292.

*di*Chloro*iso*dehydrocholal (Lassar-Cohn), 1892, A., 741.

Chlorodehydrocholic acid (Lassar-Cohn), 1892, A., 741.

Chlorodeoxybenzoin (Curtius and Lang), 1892, A., 451.

Chlorodeoxybenzoin-*o*-carboxylic acids, *a*-*di*- and -*tetra*- (Gabriel and Hendess), 1888, A., 145.

p-**Chlorodesaurin** (Petrenko-Kritschenko), 1892, A., 1227.

6-Chloro-2:5-diacetamidoquinol (Kehrmann and Tiesler), 1890, A., 243.

6-Chloro-2:5-diacetamido-4-quinone (Kehrmann and Tiesler), 1890, A., 243.

Chlorodiacetylacetone (Feist), 1892, A., 811.
  derivatives of (Levy, Witte and Curchod), 1890, A., 232.

*tetra*Chlorodiacetyl (*tetrachlorodimethyl diketone*), action of ammonia and ethylenediamine on (Levy and Jedlička), 1888, A., 443; (Levy), 1890, A., 475.

Chlorodiacetylquinol (Scheid), 1884, A., 430.

Chlorodiamylamine (Berg), 1890, A., 952.
  action of sodium and potassium cyanides on (Berg), 1892, A., 804.

5-Chloro-3:6-dianilido-2-ethoxy-1:4-quinone (Kehrmann), 1891, A., 903.

Chlorodianilidophenylquinoneimide (Andresen), 1884, A., 431.

*di*Chlorodianthranyl (Sachse), 1888, A., 1201; 1890, A., 638.

*di*Chlorodianthranyl octochloride (Sachse), 1890, A., 638.

*tetra*Chloro-*m*-diazine (*tetrachloropyrimidine*) (Ciamician and Magnaghi), 1886, A., 226.

Chlorodiazo-. See Diazo- under Azo-.

Chlorodi*iso*butylamine (Berg), 1892, A., 1173.

Chlorodi*iso*butylenic *di*chloride (Malbot and Gentil), 1889, A., 843.

Chloro-2′:3′ or 4′-diethoxymethylquinoline (Rügheimer and Hoffmann), 1886, A., 160.

Chlorodiethylamine (Gattermann), 1886, A., 796.

Chlorodiethylenediamine cobalt chloride (Jörgensen), 1889, A., 352.

Chlorodihydromecenic acid (Hilsebein), 1885, A., 1203.

p-*di*Chlorodihydroterephthalic acid (Levy and Andreocci), 1888, A., 840, 1091.

Chloro-3:5-dihydroxybenzoic acids, *di*- and *tri*- (Zincke and Fuchs), 1892, A., 1461.

Chlorodihydroxybutanes, *mono*- and *di*- (Zikes), 1885, A., 1046.

3:2′:4′-**Chlorodihydroxydihydroquinoline** (Eichengrün and Einhorn), 1890, A., 1128; 1891, A., 1100.

6:3:2:5-**Chloro-*p*-dihydroxyethoxyquinone** (Kehrmann), 1891, A., 904.

Chlorodihydroxy-*a*-picolines, *di*- and *tri*- (Hoffmann), 1889, A., 856.

3′-**Chloro-2′-4′-dihydroxy-1-methylquinoline** (*chlorohydroxy-o-tolucarbostyril*) (Rügheimer and Hoffmann), 1886, A., 160.

1:1′-*di*Chloro-2:′2-dihydroxynaphthalene and 1:3:3′:1′-*tetra*chloro-2:2′-dihydroxynaphthalene (Clausius), 1890, A., 629.

*di*Chlorodihydroxypentanecarboxylic acid (Hantzsch), 1888, A., 131; 1889, A., 853.

*tri*Chlorodihydroxypentanecarboxylic acid (Hantzsch), 1888, A., 130; 1889, A., 853; (Hoffmann), 1889, A., 856.

2:4-*di*Chloro-1:1′-dihydroxyquinoline (Hebebrand), 1889, A., 61.

Chlorodihydroxy*iso*quinoline (Rügheimer), 1886, A., 702.

Chloro-3:2:5-dihydroxyquinone (Kehrmann and Tiesler), 1890, A., 242; (Kehrmann), 1890, A., 756.

*di*Chlorodihydroxyquinone. See Chloranilic acid.

p-*di*Chloro-*p*-dihydroxyterephthalic acid (Hantzsch and Zeckendorf), 1888, A., 278.

Chloro-2:4-dihydroxy-*m*-xylene (*chlorodimethylresorcinol*) (Wischin), 1891, A., 74.

***tetra*Chlorodiketodihydropentene** (Zincke and Rabinowitsch), 1891, A., 691.

***hepta*Chloro-*m*-diketohexamethylene** (Zincke and Rabinowitsch), 1891, A., 690.

Chlorodiketohexene. See Diketohexene.

***di*Chloro-α-diketohydrindene** (Zincke), 1888, A., 489.

Chlorodiketohydronaphthalene. See Diketohydronaphthalene.

Chlorodiketopentamethylene (Hantzsch), 1888, A., 132.

Chlorodiketopentamethylenecarboxylic acid (Hantzsch), 1888, A., 132.

Chlorodiketopentamethylenehydroxycarboxylic acids, *mono-* and *di-* (Hantzsch), 1890, A., 131, 132.

***tri*Chlorodiketopentamethylenehydroxycarboxylic acid** (Hantzsch), 1888, A., 1190; (Landolt), 1892, A., 835.

***tetra*Chlorodiketopentamethylenehydroxycarboxylic acid** (Landolt), 1892, A., 836.

***mono*Chloro- and ε-*di*chloro-α-δ-diketopentanecarboxylic acids** (Hantzsch), 1889, A., 854.

***hexa*Chlorodiketotetrahydrobenzene** (Zincke and Küster), 1888, A., 1277.

***tri*Chlorodimethylacetal** (Magnanimi), 1887, A., 28.

***tri*Chlorodimethylamidophenylquinoneimide** (Möhlau), 1884, A., 595.

Chlorodimethylanilines, *o-* and *p-*, and derivatives (Heidlberg), 1887, A., 474.

4-Chloro-2:6-dimethylpyridine (4-*chloro*-2:6-*lutidine*) and its derivatives (Conrad and Epstein), 1887, A., 501.

***di*Chlorodimethylquinol** (Claus and Runschke), 1890, A., 1247.

***tetra*Chlorodimethylquinoxaline** (Levy, Witte and Curchod), 1890, A., 232.

Chlorodimethylresorcinol (*chloro*-2:4-*dihydroxy-m-xylene*) (Wischin), 1891, A., 74.

***s*-α-*di*Chlorodimethylsuccinamic acid** (Otto and Holst), 1890, A., 958.

α-*di*Chloro-*s*-dimethylsuccinic anhydride (Otto and Holst), 1890, A., 957.
- action of phenylhydrazine on (Otto and Holst), 1890, A., 1327.

***tetra*Chlorodimethyltartar-amide and -imide** (Levy, Witte and Curchod), 1890, A., 233.

***per*Chlorodioxydiphenylene** (Hugounenq), 1889, A., 1150.

***per*Chlorodiphenyl** (Merz and Weith), 1884, A., 589.

***p*-Chlorodiphenylamine** (Ikuta), 1888, A., 467.

***di-p*-Chlorodiphenylcarbamide** (Hewitt), 1891, T., 212.

Chlorodiphenylcarbamides, *m-* and *p-* (Goldschmidt and Bardach), 1892, A., 979.

***di*Chlorodiphenyldi-*m*-carboxylic acid** (Stolle), 1888, A., 700.

***o-di*Chlorodiphenylsulphone** (Friedel and Crafts), 1887, A., 1101.

***tetra*Chlorodiphthalyl** (Graebe and Guye), 1886, A., 882.

***di*Chloroditolyldiacetylethylene*di*amide** (Bischoff and Nastvogel), 1890, A., 1161.

***di*Chloroditolyl** (Stolle), 1888, A., 699.

Chlorodurene. See Durene.

Chlorodurenesulphonic acid (Töhl), 1892, A., 1465.

α-*di*Chlorofluorene (Hodgkinson and Matthews), 1883, T., 170.

***tri*Chlorofluorene** (Holm), 1883, A., 922.

β-Chlorofluorescein (Graebe and Rée), 1886, T., 530.

***di*Chlorofluorescein** (Le Royer), 1887, A., 832.

***tetra*Chlorofluorescein** (Graebe), 1887, A., 833.

Chloroform (*trichloromethane*), preparation of (anon.), 1885, A., 46; (Michaelis and Mayer), 1886, A., 999.
- preparation of, from acetone (Orndorff and Jessel), 1889, A., 34.
- purification of (Werner), 1888, A., 570.
- molecular refraction and dispersion of (Gladstone), 1891, T., 295.
- thermochemistry of (Berthelot and Matignon), 1891, A., 1311.
- coefficient of expansion of (Chancel and Parmentier), 1885, A., 631.
- peculiar phenomena in the solidification of (Pictet), 1892, A., 1138.
- specific gravity of, at different temperatures (Chancel and Parmentier), 1885, A., 631.
- action of ammonia and water on (André), 1886, A., 521.
- action of potash on a mixture of acetone and (Engel), 1887, A., 569.
- action of sodium benzenesulphinate on (R. and W. Otto), 1888, A., 841.
- action of sulphides on (Prunier), 1890, A., 291.

Chloroform (*trichloromethane*), action of alkali sulphides on (Demont), 1892, A., 421.
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estimation of, in the blood of an anæsthetised animal (Gréhant and Quinquaud), 1884, A., 375.
Chloroformamide (Gattermann and Schmidt), 1887, A., 569.
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and its use in synthesis (Gattermann), 1888, A., 574.
Chloroformberberine (Gaze), 1890, A., 1012; 1891, A., 322.
Chlorofulminuric acid (Ehrenberg), 1885, A., 1192.
Chlorofumaric acid. See Fumaric acid.
Chlorofumaric chloride (Perkin), 1888, T., 696.
molecular refraction and dispersion of (Gladstone), 1891, T., 295.
Chlorofumarimides, *mono-* and *di-* (Ciamician and Silber), 1884, A., 293.
Chlorofurfurylacraldehyde and its derivatives (Mehne), 1888, A., 453.
γ-**Chlorofurfurylacrylic acid** (Mehne), 1888, A., 453.
γ-**Chlorofurfurylpentic acid** (Mehne), 1888, A. 453.
*tetra***Chlorogallein** (Graebe), 1887, A., 833.
β-**Chloroglutaconic acid** (Burton and v. Pechmann), 1887, A., 467.
*tetra***Chloroglutaconic acid** (Zincke and Fuchs), 1892, A., 1463.
*penta***Chloroglutaric acid** (Zincke), 1892, A., 1186.
3:5-*di***Chloroglutazine** (*dichloro*-4-*amido*-2:6-*dihydroxypyridine*) (Stokes and v. Pechmann), 1887, A., 156.
*di***Chloroglyceryl acetate** (Seelig), 1892, A., 289.
Chloroglyceryl diacetate (Seelig), 1892, A., 289.
Chloro-*amphi*- and -*anti*-**glyoximes** (Hantzsch), 1892, A., 693.
Chloroheptanesulphonic acid derivatives (Spring and Winssinger), 1888, A., 939.
Chloroheptoic acid derivatives (Spring and Winssinger), 1888, A., 939.
*tri***Chlorohexahydrophloroglucinol** (Hazura and Benedikt), 1886, A., 52.
*hexa***Chlorohexamethylbenzene** (Colson), 1886, A., 1016.
p-**Chlorohydrazobenzene** (Heumann and Mentha), 1886, A., 875.
p-**Chlorohydrazobenzene**-*o*-**carboxylic acid** (Paal), 1892, A., 68.
m-**Chlorohydrindone** (v. Miller and Rohde), 1890, A., 1139.
p-**Chlorohydrindone** (Miersch), 1892, A., 1222.
Chlorohydrocinnamic acid. See Chloro-β-phenylpropionic acid.
Chlorohydrolapachol (Hooker), 1892, T., 631.
Chlorohydroxyamidohydroxyquinoneoxime (Kehrmann and Tiesler), 1890, A., 493.
*di***Chloro**-*p*-**hydroxybenzoic acid** (Claus and Riemann), 1883, A., 1112; (Zincke and Walbaum), 1891, A., 710.
Chloro-*m*-**hydroxybenzoic acids,** *tri*- and *tetra*- (Zincke and Walbaum), 1891, A., 709.
*tetra***Chlorohydroxy***iso***butyramide,** formation of (Levy, Witte and Curchod), 1890, A., 234.
Chlorohydroxybutyric acids. See Hydroxybutyric acids.
α-**Chlorohydroxybutyro**-*o*-**toluide**-*o*-**tolylcarbamine** (Rügheimer and Schramm), 1888, A., 503.
Chlorohydroxydiethylallylamine (Reboul), 1884, A., 578.

_di_Chlorohydroxydiketohydrindocarboxylic acid (Zincke), 1888, A., 489.

2:4-_di_Chloro-1-hydroxy-1′-ethoxyquinoline (Hebebrand), 1889, A., 61.

_tri_Chlorohydroxyethylidene-2′-methyl-β-naphthaquinoline (Seitz), 1889, A., 527.

2′-Chloro-4′-hydroxy-3′-ethylquinoline (Rügheimer and Schramm), 1887, A., 738.

Chlorohydroxyethyltrimethylammonium platinochloride (Bode), 1892, A., 807.

_tetra_Chloro-α-hydroxyhydrindene and **_di_chlorohydroxyketohydrindene carboxylamide** (Zincke and Arnst), 1892, A., 858.

_di_Chlorohydroxyketohydrindenecarboxylic acid, chlorinated and brominated (Zincke and Gerland), 1888, A., 1198, 1199.

Chlorohydroxyketoindene (Zincke and Gerland), 1888, A., 1199.

3′-Chlorohydroxy-1-methylcarbostyril $[(OH)_2 = 2':4']$ (Rügheimer and Hoffmann), 1886, A., 160.

2′-Chloro-4′-hydroxy-1-methyl-3′-ethylquinoline (Rügheimer and Schramm), 1887, A., 738.

_di_Chlorohydroxymethylpurin (Fischer), 1884, A., 996.

Chloro-δ-hydroxy-β-methylquinazoline (Dehoff), 1890, A., 802.

2′:3′-_di_Chloro-4′-hydroxy-1-methylquinoline, 3′:4′_di_chloro-2′-hydroxy-1-methylquinoline and **3′:4′-_di_chloro-2′-hydroxy-3-methylquinoline** (Rügheimer and Hoffmann), 1886, A., 160.

Chlorohydroxymethyl_iso_quinoline (Gabriel), 1887, A., 1112.

_tri_Chlorohydroxymethylsuccinic acid, and its salts (Fittig and Miller), 1890, A., 586.

Chlorohydroxynaphthaquinone. See Hydroxynaphthaquinone.

ββ-Chlorohydroxynaphthaquinoneanilide (Zincke and Kegel), 1889, A., 268.

Chlorohydroxynaphthaquinone-α-carboxylic acid (Ekstrand), 1889, A., 153.

Chlorohydroxynaphthaquinoneimide and **β-chlorohydroxy-α-naphthaquinoneoxime** (Zincke and Schmunk), 1890, A., 1147.

Chloro-α-hydroxynaphthaquinonesulphonic acid (Claus and van der Cloet), 1888, A., 603.

Chlorohydroxy-α-naphthoic acid (Ekstrand), 1889, A., 153.

αβ-_di_Chloro-β-hydroxy-α-naphthylphenylamine (Zincke and Kegel), 1889, A., 268.

Chlorohydroxyoxydipropionic acid (Willgerodt and Schiff), 1890, A., 959.

γγ-_hexa_Chloro-α-hydroxypentene cyanide (Zincke and Küster), 1890, A., 1256.

γγ-_hexa_Chlorohydroxypentenecarboxylic acid (Zincke and Küster), 1890, A., 754.

Chlorohydroxyphenindulone (Kehrmann and Messinger), 1891, A., 747.

ββ-_di_Chloro-α-hydroxyphenylpyridone and its carboxylic acid (Zincke and Fuchs), 1892, A., 448, 449.

Chlorohydroxyphenylthiazole (Schatzmann), 1891, A., 745.

Chlorohydroxypicolinic acid. See Hydroxypicolinic acid.

β-_tri_Chloro-α-hydroxypropenyl-amidoxime and **-ethenylazoxime** (Richter), 1892, A., 321.

ω-_tri_Chloro-β-hydroxypropylacridine (*methyl acridinechloral*) (Bernthsen and Muhlert), 1887, A., 849.

_tri_Chlorohydroxypropylamine (Fauconnier), 1888, A., 1265.

ω-_tri_Chlorohydroxypropylpyrroline (Einhorn and Liebrecht), 1887, A., 845.

_tri_Chloro-α-hydroxypropylquinoline (Einhorn), 1886, A., 721.

_di_Chlorohydroxypyridine (Koenigs and Geigy), 1884, A., 1369.

Chlorohydroxyquinoline. See Hydroxyquinoline.

Chlorohydroxy_iso_quinolines, *mono-* and *di-* (Rügheimer), 1886, A., 702.

2-Chloro-3-hydroxyquinolinequinone and its anilide (Zincke) 1891, A., 1251.

_p_-Chlorohydroxyquinone (Stieglitz), 1891, A., 456.

Chlorohydroxy-_o_-tolucarbostyril. See 3′-Chloro-2′:4′-dihydroxy-1-methylquinoline.

_di_Chlorohydroxytrimethyluracil (Hagen), 1888, A., 582.

Chlorohydroxyvaleric acids (Melikoff and Petrenko-Kritschenko), 1890, A., 736, 862; (Melikoff), 1888, A., 1177.

Chloroketodihydroquinolines, *tri-* and *tetra-* (Zincke), 1891, A., 1250.

_tetra_Chloroketohydrindene (Zincke and (Fröhlich), 1887, A., 955.

Chloroketohydronaphthalene. See Ketohydronaphthalene.

***tri*Chloro-β-ketohydronaphthalene-α-oxime** (Zincke and Schmunk), 1890, A., 1148.

γ_1-Chloro-α_2-ketojuloline (Reissert), 1892, A., 884.

Chloroketonaphthalene. See Ketonaphthalene.

***hexa*Chloroketopentene** [m.p. 31°] (Zincke and Küster), 1888, A., 1278.

γγ-*hexa*Chloroketopentene [m.p. 92°] (Zincke and Küster), 1889, A., 599; 1890, A., 754, 1255.

***penta*Chloro-α-ketophenyl-γ-piperidone** (Zincke and Fuchs), 1892, A., 449.

***tri*Chloroketoquinoline** (Hebebrand), 1889, A., 61.

***penta*Chloroketoquinoline,** derivatives of (Hebebrand), 1889, A., 62.

Chloroketotetrahydrobenzoic acids, *penta-* and *hexa-* (Zincke and Walbaum), 1891, A., 708, 710.

***tetra*Chloroketotetrahydroquinoline hydrate** (Zincke), 1891, A., 1252.

***tetra*Chloroketotrihydroxypentamethylenecarboxylic acid** (Hantzsch), 1890, A., 130.

***tri*Chlorolactic acid,** preparation of glyoxal derivatives from (Pinner), 1884, A., 1298.

Chlorolactic acids, decomposition products of the sodium salts of (Reisse), 1890, A., 1097.

α-Chloro-γ-lepidine. See 2′-Chloro-4′-methylquinoline.

***tri*Chlorolimettin** (Tilden), 1892, T., 349.

Chlorolevulinic acids, *mono-* and *di-* (Seissl), 1889, A., 489.

Chloro-2:6-lutidine. See Chloro-2:6-dimethylpyridine.

***di*Chloromaleinamic acid** (Ciamician and Silber), 1890, A., 25.

Chloromaleic acid (Kauder), 1885, A., 652; (Perkin), 1888, T., 706; P., 75.

***di*Chloromaleic acid** and its anhydride (Kauder), 1885, A., 652.

Chloromaleic anhydride (Perkin), 1888, T., 703; P., 75.

***di*Chloromaleic phenylimide** and α- and β-*di*chloromaleic *tetra*chlorides (Kauder), 1885, A., 652.

Chloromaleinimide. See Maleinimide.

***di*Chloromaleinphenylimido- chloride** and **-dimethyl** and **-diethyl ethers** (Anschütz and Beavis), 1891, A., 1047, 1048.

Chloromecenic acid and its salts (Hilsebein), 1885, A., 1202.

***per*Chloromecylene** (Ost), 1883, A., 796.

Chloromercuric acid (Neumann), 1889, A., 1050.

***tri*Chloromesitylene** (Friedel and Crafts), 1887, A., 1101.

Chloromethane. See Methylic chloride.

***di*Chloromethane.** See Methylenic *di*chloride.

***tri*Chloromethane.** See Chloroform.

***tetra*Chloromethane.** See Carbon *tetra*chloride.

Chloromethanedisulphonic acid (Andreasch), 1886, A., 787.

Chloromethoxybenzoic acid (*chloranisic acid*) (Schall and Dralle), 1885, A., 146.

Chloromethoxybenzoic anhydride (*chloranisaldehyde*) (Tiemann), 1891, A., 703.

***tetra*Chloromethoxyethane** (Magnanimi), 1887, A., 28.

4′-Chloro-*p*-methoxy-2′-methylquinoline (Conrad and Limpach), 1888, A., 853.

Chloromethoxy*iso*quinoline [m.p. 73°-74°] (Gabriel), 1887, A., 62.

Chloro-*p*-methoxytoluene (Schall and Dralle), 1885, A., 146; (Limpach), 1889, A., 499.

Chloromethyl *tetra*chloropropyl ketones, *di-* and *tri-* (Zincke and Fuchs), 1892, A., 1462, 1463.

***di*Chloromethyl chlorovinyl *o*-diketone** (Zincke and Rabinowitsch), 1891, A., 690.

Chloromethylamidobenzoic acids (La Coste and Bodewig), 1885, A., 793.

***diper*Chloromethylamidocyanidine** and ***diper*chloromethyl*di*amidocyanidine** (Weddige), 1886, A., 324.

***penta*Chloromethylamido-*p*-diketohexene** (Zincke and Fuchs), 1892, A., 449.

ω-Chloromethyl-*o*-amidostyrene (Lipp), 1885, A., 167.

***p*-Chloromethylaniline** (Meldola and Streatfeild), 1889, T., 436; P., 98.

***o*-Chloromethylbenzamide** (Gabriel), 1887, A., 1038.

Chloro-α-methylcinnamic acid. See Chlorophenylcrotonic acid.

Chloromethylcrotonic acid. See Chlorotiglic acid.

Chloro-3-methyl-2′:3′- or 4′-diethoxyquinoline (Rügheimer and Hoffmann), 1886, A., 160.

Chloromethylenephthalide (Zincke and Cooksey), 1890, A., 786.

***tri*Chloromethylethylacetal** (Magnanimi), 1887, A., 28.

Chloro-5-methyl-1-ethylglyoxaline (*chloroxalethyline*) and its derivatives (Wallach), 1883, A., 49.

m-**Chloro-β-methylhydrindone** (v. Miller and Rohde), 1890, A., 1140.

α-**Chloro-α-methylhydroxybutyric acid** (Melikoff and Petrenko-Kritschenko), 1890, A., 862.

β-**Chloro-α-methyl-α-hydroxybutyric acid** (Melikoff), 1888, A., 1177.

Chloromethylindene (v. Miller and Rohde), 1889, A., 984.

Chloromethyl-ψ-isatin (La Coste and Bodewig), 1885, A., 792.

Chloro-α- and -β-methylnaphthalenes (Scherler), 1892, A., 494.

Chloro-β-methylnaphthalenes, *di-*, *tri-* and *tetra-* (Scherler), 1892, A., 493.

Chloro-2′-methyl-β-naphthaquinoline (Ephraim), 1892, A., 1488.

*di***Chloromethyloxindole** (Colman), 1889, T., 4; P., 95.

*di***Chloromethylparaconic acid** (Fittig and Miller), 1890, A., 587.

*tri***Chloromethylparaconic acid** (Fittig), 1888, A., 252; (Fittig and Miller), 1890, A., 586.

*tetra***Chloromethylphthalide** (Zincke and Cooksey), 1890, A., 786.

Chloromethylpiaselenole (Hinsberg), 1890, A., 973.

*tri***Chloromethylpropylcarbinol** (*trichloramylic alcohol*) and its derivatives (v. Garzarolli-Thurnlackh), 1884, A., 1118.

*tri***Chloromethylpurin** (Fischer), 1884, A., 996.

Chloromethylpyridine. See Chloro-α-picoline.

αββ-*tri***Chloromethyl-γ-pyridone** and its carboxylic acid (Zincke and Fuchs), 1892, A., 450.

Chloromethylquinoline and its derivatives. See Methylquinoline.

Chloromethylstilbene (Sudborough), 1892, A., 1224.

*tri***Chloromethylsulphonic chloride** (McGowan), 1885, A., 367.
  preparation of (Bassett), 1886, A., 1000.
  dissociation of (Nölting), 1883, A., 38.
  action of ammonia on (McGowan), 1884, A., 1126.

*tri***Chloromethylsulphonylthiocarbamide** (McGowan), 1887, T., 669.

Chloromethylthiazolecarboxylic acid (Wohmann), 1891, A., 226.

β-*di***Chloromuconamic acid** (Ruhemann and Elliott), 1890, T., 934.

*di***Chloromuconic acid**, reduction products of (v. Baeyer and Rupe), 1890, A., 875.

β-*di***Chloromuconic acid** and its amide (Ruhemann and Elliott), 1890, T., 932.

*di***Chloro-α-naphtha*di*chloroquinol** (Claus), 1886, A., 714.

Chloronaphthalene. See Naphthalene.

β-**Chloronaphthalenedisulphonic acids** (Armstrong and Wynne), 1890, P., 131.

2-Chloronaphthalene-1:6-disulphonic acid chloride (Forsling), 1889, A., 276.

Chloronaphthalenesulphonic acid. See Naphthalenesulphonic acid.

*di***Chloro-1:4-naphthaquinol** (Claus), 1886, A., 714.

Chloronaphthaquinone. See Naphthaquinone.
  anilide. See Naphthaquinone anilide.

*di***Chloronaphthaquinonecarboxylic acid** (Ekstrand), 1889, A., 152.

Chloro-β-naphthaquinone derivatives (Zincke), 1887, A., 53.

*di***Chloro-α-naphthaquinone** *di***chloride** (Claus), 1890, A., 786.

Chloro-β-naphthaquinone-α-oximes, *mono-* and *di-* (Zincke and Schmunk), 1890, A., 1146, 1147.

2:3-*di***Chloro-α-naphthaquinone-3′-sulphonic acid** (Claus and van der Cloet), 1888, A., 602.

β-**Chloronaphthaquinonetoluidides**, *o-* and *p-* (Claus and Mueller), 1886, A., 247.

Chloronaphthoic acid. See Naphthoic acid.

α-**Chloronaphthoic** *tri***chloride** (Wolffenstein), 1888, A., 714; 1889, A., 615.

β-**Chloronaphthoic** *tri***chloride** (Rabe), 1889, A., 514.

Chloronaphtholactone (Ekstrand), 1889, A., 153.

Chloronaphthol. See Naphthol.

Chloro-β-naphthol-3′-sulphonic acid, derivatives of (Armstrong and Rossiter), 1889, P., 72.

Chloro-α-naphthonitrile (Ekstrand), 1884, A., 1361.

Chloro-β-naphthonitriles, *mono-* and *di-*, and their derivatives (Ekstrand), 1891, A., 932.

4′-Chloronaphthostyril (Ekstrand), 1889, A., 153.

*di***Chloronaphthostyril** (Ekstrand), 1886, A., 715.

Chloronaphthylamine. See Naphthylamine.

β-Chloro-α-naphthylamine-2′-sulphonic acid (Cleve), 1892, A., 1479.

α-Chloro-β-naphthylaminesulphonic acids (the [1:2:4′], [1:2:3′], and [1:2:2′] acids) (Armstrong and Wynne), 1889, P., 36, 48.

Chloro-α- and **-β-naphthylethylenes** (Leroy), 1892, A., 495.

6-Chloronicotinic acid (v. Pechmann and Welsh), 1885, T., 151.

***di*Chloronicotinic acid** (Seyfferth), 1887, A., 158.

ω-*di*Chloro-*o*-nitracetophenone (Gevekokt), 1884, A., 445.

Chloro-3-nitr-*p*-acetotoluidide (Eckenroth and Donner), 1891, A., 195.

3:6-Chloronitr-*p*-acetotoluide (Claus and Böcher), 1892, A., 173.

Chloro*tri*nitranilidonaphthalene (Cleve), 1890, A., 626.

***p*-Chloro-*m*-nitraniline** and its derivatives (Claus and Stiebel), 1887, A., 810.

di*Chloronitr-**, 2:4:6-tri*chloro-3:5-*di*nitr-**, and **2:4:6-*tri*chloro-3-nitr-anisoil** (Hugounenq), 1890, A., 240.

Chloronitrazobenzene. See Azobenzene.

Chloronitrethylbenzenes (Istrati), 1888, A., 260.

***o*-*di*Chloronitrethylbenzoylcarboxylic acid** (Zincke and Latten), 1892, A., 1229; (Zincke and Scharfenberg), 1892, A., 1232.

***di*Chloronitrethyl-*m*-diazine** (Pinner), 1889, A., 1007.

Chloronitriles, volatility of (Henry), 1885, A., 1044.

Chloronitrobenzaldehyde. See Benzaldehyde.

***p*-Chloro-*m*-nitrobenzanilide** (Raveill), 1884, A., 601.

Chloronitrobenzene. See Benzene.

4-Chloro-3-nitrobenzenesulphonic acid (Fischer), 1892, A., 182.

2-Chloro-5-nitrobenzenesulphonic acid (Claus and Mann), 1891, A., 1488; (Fischer), 1892, A., 182.

Chloronitrobenzoic acid. See Benzoic acid.

Chloronitrobenzonitriles (Claus and Kurz), 1888, A., 594.

***o*-Chloro-*p*-nitrobenzylic** alcohol, anilide and methyl and ethyl ethers (Witt), 1892, A., 444.
  bromide (Tiemann), 1891, A., 704.
    derivatives of (Witt), 1892, A., 444.

Chloronitrocamphor. See Camphor.

α-Chlor-*o*-, *-m-* and ***-p-*nitrocinnamaldehydes** (Naar), 1891, A., 562.

***m*-Chloro-*o*-nitrocinnamic acid** and **ketone** (Eichengrün and Einhorn), 1891, A., 1098.

Chloro-*o*- and **-*m*-nitrocinnamic acids** (Naar), 1891, A., 564.

2:5-Chloronitro-*p*-cymene and **2-chloro-*di*nitro-*p*-cymene** (Fileti and Crosa), 1889, A., 493.

Chloronitrocymenesulphonic acid (Carrara), 1890, A., 780.

***o*-*di*Chloro-*p*-*di*nitro-dibenzylamine** and **-dibenzylaniline** (Witt), 1892, A., 445.

2:3:5-*di*Chloronitrodihydroterephthalic acid (Levy and Andreocci), 1888, A., 1091.

3:4:3-*di*Chloronitro-1:2-diketohydronaphthalene hydrate (Zincke and Scharfenberg), 1892, A., 1232.

***allo-m*-Chloro-*o*-nitrodiphenylhydrazine**, preparation of (Willgerodt and Ellon), 1891, A., 1361.

***m*-Chloro-*o*-nitrohydrazobenzene** (Willgerodt and Ferko), 1888, A., 830.

***o*-Chloronitrohydroxyethylbenzoic acid**, lactone of (Zincke and Latten), 1892, A., 1230.

3′:4′-*di*Chloro*di*nitro-2′-hydroxy-3-methylquinoline (Rügheimer and Hoffmann), 1886, A., 160.

***m*-Chloro-*o*-nitro-β-hydroxyphenylethyl methyl ketone** (Eichengrün and Einhorn), 1890, A., 1128; 1891, A., 1099.

***m*-Chloro-*o*-nitro-β-hydroxyphenylpropionamide** (Eichengrün and Einhorn), 1890, A., 1127; 1891, A., 1100.

***m*-Chloro-*o*-nitro-β-hydroxyphenylpropionic acids** (Eichengrün and Einhorn), 1890, A., 1127; 1891, A., 1099.

***m*-Chloro-*o*-nitro-β-hydroxyphenylpropionic aldehyde** (Eichengrün and Einhorn), 1891, A., 1100.

Chloro*di*nitromethane, reduction of (Raschig), 1886, A., 323.

***di*Chloro*di*nitromethane** (Losanitsch), 1884, A., 1108.

***tri*Chloronitromethane.** See Chloropicrin.

***o*-Chloronitromethoxyethylbenzoic acid** (Zincke and Latten), 1892, A., 1231.

***di*Chloronitromethylphthalide** (Zincke and Latten), 1892, A., 1231.

4′-Chloro-3′-nitro-2′-methylquinoline (Conrad and Limpach), 1888, A., 1111.

β-Chloro-α-nitronaphthalene [1:2′] (Armstrong and Wynne), 1889, P., 71.

***di*Chloro*di*nitronaphthalenes** (Cleve), 1890, A., 626.
β-Chloro-α-nitronaphthalene-2′-sulphonic acid (Cleve), 1892, A., 1478.
αβ-Chloronitro-β-naphthaquinone (Zincke and Kegel), 1889, A., 266.
5-Chloro-δ-nitro-α-naphthoic acid (Ekstrand), 1886, A., 156.
1:1′:4′-Chloronitronaphthoic acid (Ekstrand), 1889, A., 53.
β-Chloro-2′-nitronaphthol (Gaess), 1892, A., 1229.
Chloro*tri*nitronaphthol (Cleve), 1890, A., 627.
Chloro*tri*nitronaphthylamine (Cleve), 1890, A., 626.
Chloronitronitrosoazoxybenzene (Willgerodt and Mühe), 1892, A., 455.
***tri*Chloronitrophenetoil** (Lampert), 1886, A., 616.
Chloronitrophenol. See Phenol.
***m*-Chloro-*o*-nitrophenyl-β-bromopropionic acid** (Eichengrün and Einhorn), 1890, A., 1127.
Chloronitrophenylethanes (Istrati), 1888, A., 260.
***di*Chloronitrophenylethylglyoxylic acid** (Zincke and Latten), 1892, A., 1229; (Zincke and Scharfenberg), 1892, A., 1232.
***tri*Chloronitrophenylic-*m*- and -*o*-nitrobenzoates** (Daccomo), 1885, A., 890.
1′:4′:3′-Chloronitrophenyl*iso*quinoline (Gabriel), 1886, A., 631.
***di*Chloronitropyromucic acid** (Hill and Jackson), 1890, A., 601.
Chloronitroquinones (Guareschi and Daccomo), 1885, A., 891.
2:4:6-Chloro*di*nitroresorcinol (Kehrmann), 1890, A., 241.
Chloronitrosoazobenzene. See Azobenzene.
***p*-Chloro*di*nitrosoazoxybenzene** (Willgerodt and Böhm), 1891, A., 905.
***p*-*di*Chloro-*p*-*di*nitrosobenzene** (Kehrmann), 1889, A., 245.
Chloro-*p*-nitrosodiphenylamine (Ikuta), 1888, A., 468.
Chloronitrosonaphtharesorcinol (v. Kostanecki), 1889, A., 887.
***di*Chloro*diexo*nitrosoditoluene** (*bis-o-chloronitrosylbenzyl*) (Behrend and Nissen), 1892, A., 1200.
***o*-*di*Chloro-*p*-*di*nitrostilbene** (Witt), 1892, A., 444.
ω-Chloro-*o*-nitrostyrene (Lipp), 1884, A., 1030.
***m*-Chloro-*o*-nitrostyryl methyl ketone** (Eichengrün and Einhorn), 1891, A., 1099.
***o*-*di*Chloro*di*nitrosyldibenzyl** (Behrend and Nissen), 1892, A., 1200.
Chloronitrothiophen (Rosenberg), 1886, A., 534.
***tri*Chloronitrotoluene.** See Toluene.
Chloronitro-*p*-toluic acid. See *p*-Toluic acid.
2-Chloro-5-nitro-*p*-toluidine and **2-chloro-6-nitro-*p*-toluidine** (Claus and Davidsen), 1892, A., 172.
3-Chloro-6-nitro-*p*-toluidine and **3-chloro-6-nitro-*p*-toluonitrile** (Claus and Böcher), 1892, A., 173.
2-Chloro-5-nitro-*p*-toluonitrile (Claus and Davidsen), 1892, A., 172.
4-Chloro-5-nitro-*m*-xylene (Claus and Groneweg), 1891, A., 921.
4-Chloro-6-nitro-*m*-xylene (Ahrens), 1892, A., 1437.
4:6-*di*Chloro-2:5-*di*nitro-*m*-xylene (Koch), 1890, A., 1248.
4:5-*di*Chloro-3:6-*di*nitro-*o*-xylene (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1201.
2:5-*di*Chloro*di*nitro-*p*-xylene (Kluge), 1885, A., 1208.
Chlorononane, from American petroleum (Lemoine), 1884, A., 1106.
Chloropal, analyses of (Smith), 1884, A., 662.
  variety of, from Albemarle Co., Virginia (Chappell), 1885, A., 228.
***di*Chloropararosaniline** (Heumann and Heidlberg), 1886, A., 942.
Chloropentamethylbenzene (Töhl), 1892, A., 968.
Chloro-α-pentaresorcinoldichroin ether (Brunner and Chuit), 1888, A., 1182.
Chloropentenylic alcohol. See Methylchlorallylcarbinol.
Chloropentethylbenzene (Istrati), 1886, A., 231.
***penta*Chloropentolamide.** See *penta*-Chlorobutinenecarboxylamide.
***di*Chlorophenanthrone,** reduction of (Lachowicz), 1884, A., 81.
***tri*Chlorophenetoil** (Lampert), 1886, A., 616.
Chlorophenol. See Phenol.
***o*-*p*-*di*Chlorophenol-*o*-sulphonic acid,** action of sulphuric acid on (Gordon), 1891, P., 64.
***tri*Chlorophenomalic acid.** See Acetylacrylic acid, *tri*chlor-.
***tri*Chlorophenoxyethylene** (*phenyl trichlorovinyl ether*) (Michael), 1886, A., 614.
Chlorophenylacetonitrile (Michael and Jeanprêtre), 1892, A., 1088.

*di***Chlorophenylamido-β-naphthol** (Zincke and Kegel), 1889, A., 268.
*p***-Chlorophenyl*iso*butane** (v. Dobrzycki), 1888, A., 369.
Chlorophenylbutyric acid (Fittig and Morris), 1890, A., 891; (v. Miller and Rohde), 1890, A., 1140.
*di-p***-Chlorophenylcarbamide** (Hewitt), 1891, T., 212.
Chlorophenylcrotonic acids. See Phenylcrotonic acids.
*di***Chlorophenylenediamine hydrochloride** (Möhlau), 1886, A., 941.
Chlorophenylethanes, *o-*, *m-* and *p-* (Istrati), 1885, A., 251.
Chlorophenylhydrazine and its derivatives. See Phenylhydrazine.
Chlorophenylic benzoates (Mosso), 1888, A., 456.
    o-, *m-* and *p-* (Daccomo), 1892, A., 308.
  phthalate (Mosso), 1888, A., 456.
  sulphide (Michaelis and Godchaux), 1891, A., 715.
  *di*thiocarbonate (Daccomo), 1892, A., 306, 307.
  xanthate (Daccomo), 1892, A., 308.
*tri***Chlorophenylic** *m***-nitrobenzoate** (Daccomo), 1885, A., 890.
*p***-Chlorophenylic phenylsemithiocarbazide** (Hewitt), 1891, T., 212.
*p***-Chloro-2′-phenylindazole** (Paal), 1891, A., 724.
Chloro-2′-phenylindole (Bischler), 1892, A., 1466.
Chlorophenylmethylenesulphone (Otto), 1888, A., 483.
*m***-Chloro-β-phenyl-α-methylpropionic acid** (v. Miller and Rohde), 1890, A., 1140.
*di***Chlorophenylmethylpyrazolonesulphonic chloride** (Möllenhoff), 1892, A., 1246.
Chlorophenylmethylsulphones, *mono-* and *di-* (Otto), 1890, A., 380, 381.
Chlorophenylparaconic acid. See Phenylparaconic acid.
*az***-Chlorophenyl-*ald*-phenylnaphthotriazine** (Meldola and Forster), 1891, T., 690.
Chlorophenylphenylsemithiocarbazides, *o-* and *p-* (Hewitt), 1891, T., 210, 212.
*p***-Chloro-β-phenylpropionic acid** (Miersch), 1892, A., 1222.
*di***Chloro-β-phenylpropionic acids,** *α-* and *β-* (Erlenmeyer), 1883, A., 196.
Chloro-β-phenylpropionic acids, *m-*, *o-*, and *p-* (Herzberg), 1885, A., 661.
*αββ-tri***Chloro-γ-phenylpyridone** and *αββ-tri***chlorophenyl-γ-pyridonecarboxylic acid** (Zincke and Fuchs), 1892, A., 448.
*o***-Chlorophenylsemicarbazide** (Hewitt), 1891, T., 210.
*p***-Chlorophenylsulphonehydroxypropionic acid** (König), 1892, A., 1091.
*p***-Chlorophenylurazole** (Hewitt), 1891, T., 212.
Chlorophloroglucinols (Hazura and Benedikt), 1886, A., 52.
*tri***Chlorophloroglucinol** (Webster), 1885, T., 423; (Zincke and Kegel), 1889, A., 967.
Chlorophthalic acids. See Phthalic acids.
Chlorophthalic anhydride. See Phthalic anhydride.
Chlorophthalic chloride (Graebe and Rée), 1886, T., 527.
*di***Chlorophthalide** (Le Royer), 1887, A., 832.
*p-di***Chlorophthalide** (Guareschi), 1886, A., 808.
*β***-Chlorophthalimide** (Graebe and Rée), 1886, T., 529.
*di***Chlorophthalimide** (Le Royer), 1887, A., 832.
Chlorophyll and **chlorophyllan.** See Agricultural chemistry.
Chlorophyllite from Loquidy, near Nantes (Baret), 1883, A., 443.
Chloro-α-picolines (*chloromethylpyridine*), *mono-*, *hexa-* and *penta-* (Ost), 1883, A., 793.
*di***Chloro-α-picoline** (Collie and Myers), 1892, T., 725.
Chloropicolinic acid, [m.p. 180°] (Seyfferth), 1887, A., 157.
Chloropicolinic acid [m.p. 168°], *di***chloropicolinic acid** and their salts (Ost), 1883, A., 794.
Chloropicrin, reduction of (Raschig), 1886, A., 323.
  syntheses with (Elbs), 1883, A., 1000.
*di***Chloropiperazine** (Schmidt and Wichmann), 1892, A., 211.
Chloroplastids and **chloroplastin** (Schwartz), 1888, A., 983.
Chloroplatinic acid (Pigeon), 1891, A., 1325.
Chloroprehnitenes, *mono-* and *di-* (Töhl), 1892, A., 967.
*α-di***Chloropropaldehyde** (Spring and Tart), 1890, A., 955.
Chloropropanes, *tri-* and *tetra-* (Spring and Winssinger), 1883, A., 659.
1:2:3-*tri***Chloropropane.** See Trichlorhydrin.

*hexa***Chloropropane** (Levy and Curchod), 1889, A., 1136.

Chloropropanesulphonic acid (Spring and Winssinger), 1883, A., 659.

*tri***Chloropropenylquinoline** (Einhorn and Lehnkering), 1888, A., 1208.

β-*di***Chloropropionic acid**, and its derivatives (Fromme and Otto), 1887, A., 912.

*tetra***Chloropropionic acid** (Mabery and Smith), 1890, A., 27.

α-*di***Chloropropionic anhydride** (Otto and Holst), 1890, A., 1327.

α-*di***Chloropropionitrile**, solid (Otto and Voigt), 1887, A., 1024.
  molecular weight of (Otto), 1890, A., 726.

*o-penta***Chloropropionylbenzoic acid** (Zincke and Cooksey), 1890, A., 785.

β- and γ- **Chloropropylbenzamides** (Gabriel and Heymann), 1890, A., 1268; (Gabriel and Elfeldt), 1892, A., 213.

Chloropropylbenzene. See Chloro-*n*-cumene.

*tri***Chloropropyleneoxidecarboxylamide** (Levy, Witte and Curchod), 1890, A., 234.

Chloropropylenes. See Propylenes.

Chloropropylenic oxide. See Epichlorhydrin.

Chloro*iso***propylic benzoate**, preparation of (Morley and Green), 1885, T., 135.

2′-**Chloro-2-***iso***propylquinoline** (Widman), 1886, A., 465.

Chloropyrenepicric acid (Goldschmiedt and Wegscheider), 1883, A., 1001.

Chloropyridine. See Pyridine.

Chloropyridine-α-carboxylic acid [m.p. 180°] (*chloropicolinic acid*) (Seyfferth), 1887, A., 157.

Chloropyridine-α-carboxylic acids, *mono-* and *di-* (Ost), 1883, A., 794.

Chloropyridine-β-carboxylic acid (*chloronicotinic acid*) (v. Pechmann and Welsh), 1885, T., 151.

*di***Chloropyridinecarboxylic acid** [$Cl_2 : COOH = 1 : 6 : 4$](?) (Behrmann and v. Hofmann), 1885, A., 139.

*di***Chloropyridine-β-carboxylic acid** (Seyfferth), 1887, A., 158.

2:6:*di***Chloropyridine-3:5-dicarboxylic acid** (Guthzeit and Dressel), 1891, A., 940.

Chloropyrimidine. See Chloro-*m*-diazine.

*tetra***Chloropyrocatechol** (Zincke), 1887, A., 808; (Zincke and Küster), 1888, A., 1278.

*per***Chloropyrocoll**, action of phosphorus pentachloride on (Ciamician and Silber), 1884, A., 176.
  octochloride or perchloride of (Ciamician and Silber), 1884, A., 292.

*tri***Chloropyrogallol** (Webster), 1884, T., 205; (Hantzsch and Schniter), 1887, A., 925.

Chloropyromecenic acid (Hilsebein), 1885, A., 1203.

*tri***Chloropyromucamide** (Hill and Jackson), 1890, A., 601.

Chloropyromucic acid. See Pyromucic acid.

Chloropyrotritaric acid (Dietrich and Paal), 1887, A., 658.

*tetra***Chloropyrroline**, and synthesis of (Ciamician and Silber), 1884, A., 292, 293.

*di***Chloropyruvic acid** (Hantzsch), 1890, A., 132.

β-δ-*di***Chloroquinazoline** (Abt), 1888, A., 610.

Chloroquinol (Scheid), 1884, A., 429.

*m-di***Chloroquinol** (Kehrmann and Tiesler), 1890, A., 242.

*tetra***Chloroquinol** (Sutkowski), 1887, A., 42.

α-**Chloro-β-quinolinecarboxylic acid** (Friedländer and Göhring), 1884, A., 1020.

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1-**Chloroquinoline-4-sulphonamide, -sulphonic acid** and **-sulphonic chloride** (Claus and Posselt), 1890, A., 522, 523.

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*tri***Chloroquinonechlorimide** and *mono-* and *di*-**chloroquinonedianilides** (Andresen), 1884, A., 431.

*di***Chloroquinone***di***chlorimide** (Möhlau), 1886, A., 941.

*di***Chloroquinonedihydrodicarboxylic acid** (Hantzsch and Zeckendorf), 1888, A., 278.

*tri***Chloroquinoneimide hydrochloride** (Andresen), 1884, A., 431.

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*di***Chlororufigallol** (Webster and Hunt), 1889, A., 405.

5-**Chlorosalicylic acid** (Smith and Knerr), 1886, A., 704.

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2:4-*di***Chlorosalicylic acid** (Zincke and Walbaum), 1891, A., 711.

3:5-*di*Chlorosalicylic acids (Einhorn and Knerr), 1886, A., 704; (Hecht), 1890, A., 1418.
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***di*Chlorosulphopyromucic acid** (Hill and Jackson), 1890, A., 601.
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***p*-*di*Chloroterephthalamide** (Levy and Curchod), 1889, A., 1179.
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***di*Chloroterephthalic acid** (Levy and Andreocci), 1888, A., 841, 1091.
***p*-*di*Chloroterephthalic chloride** (Levy and Curchod), 1889, A., 1179.
***tri*Chlorotetraketohexamethylene hydrate** (Landolt), 1892, A., 835.
***tetra*Chlorotetraketohexamethylene** (Nef), 1890, A., 1271; (Landolt), 1892, A., 836.
***tetra*Chlorotetra-methoxy-** and **-ethoxy-quinhydrones** (Kehrmann), 1891, A., 905.
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***di*Chlorotetrapyridinerhodium hydrochloride** (Jörgensen), 1889, A., 352.
μ-Chlorothiazole (Schatzmann), 1891, A., 745.
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***tri*Chlorothiophen,** and its derivatives (Rosenberg), 1886, A., 534.
***tetra*Chlorothiophen *tetra*chloride** (Willgerodt), 1886, A., 339.
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***tri*Chlorothiophensulphonic anhydride** (Rosenberg), 1886, A., 534.
α-Chlorothymoquinol (Schniter), 1887, A., 720.
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***penta*Chlorotoluene** (Seelig), 1885, A., 770.
***o*-Chlorotoluene-*p*-sulphonamide** (Paysan), 1884, A., 72.
***p*-Chlorotoluene-*o*-sulphonamide** (Heffter), 1884, A., 73.
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***tri*Chlorotoluquinone** (Claus and Riemann), 1883, A., 1112.
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***o*-Chloro-*m*-tolyl** and ***m*-chloro-*o*-tolyl methyl ketones** (Claus), 1891, A., 911.
***p*-Chloro-*m*-tolyl methyl ketone** and **ketoxime** (Claus), 1892, A., 1201.
***tri*Chloro-*o*-tolylacetamide** (Cloëz), 1887, A., 1098.
***di*Chlorotolylbenzoic acid** (Le Royer), 1887, A., 832.
***di*-*o*-Chloro-*m*-tolylcarbamide** (Kock), 1887, A., 810.
***tri*Chlorotolylenediamines,** α- and β- (Seelig), 1885, A., 770.
***di*Chloro-*o*-tolylic phosphate** (Stuart), 1888, T., 403; P., 24.
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1′-Chloro-3′-*m*-tolyl*iso*quinoline (Heilmann), 1890, A., 625; 1891, A., 202.

1′-**Chloro-3′-*p*-tolyl*iso*quinoline** (Ruhemann), 1892, A., 474.
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*di***Chlorotri*iso*butylene *di*chloride** (Malbot and Gentil), 1889, A., 843.
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*tri***Chlorotriketopentamethylene** (Hantzsch), 1888, A., 1190; (Landolt), 1892, A., 835.
*tri***Chlorotriketovaleric acid** (Hantzsch), 1888, A., 1192.
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*hexa***Chlorotrimethylenetrisulphone** (Camps), 1892, A., 592.
4′-**Chloro-1:3:2′-trimethylquinoline** (Conrad and Limpach), 1888, A., 503.
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*tri***Chlorotriphenylrosanilines** (Heumann and Heidlberg), 1886, A., 943.
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*di***Chloro-*o*-vinylbenzoic acid** (Zincke and Fröhlich), 1887, A., 955; (Zincke), 1888, A., 159.
*tri***Chloro-*o*-vinylbenzoic acid** (Zincke and Fröhlich), 1887, A., 955; (Zincke), 1888, A., 490.
*o-di***Chlorovinylbenzoylcarboxylic acid** (Zincke and Kegel), 1889, A., 270.
*o-tri***Chlorovinylbenzoylcarboxylic acid** (Zincke), 1888, A., 490.
*o-di***Chloro-** and *tri***chloro-vinyl*di*-α-chlorophenylacetic acids** (Zincke and Kegel), 1889, A., 270.
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*m-di***Chloroxyazobenzene** (Schultz), 1884, A., 903.
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*di***Chloroxydimethylpurin** (Fischer), 1884, A., 997.
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5-**Chloro-*o*-xylidine** [1:2:4-] (Claus), 1892, A., 1202.
2-**Chloro-*p*-xylidine** [1:4:5-] (Kluge), 1885, A., 1208.
4:6-*di***Chloro-*m*-1:3-xylo-2:5-quinol** and **-quinone** (Claus and Runschke), 1890, A., 1247.
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3-**Chloro-1:2-xylyl methyl 6(?)-ketone** and its derivatives (Claus), 1892, A., 1202.
4-**Chloro-1:2-xylyl methyl 5-ketone** and derivatives (Claus), 1891, A., 912; 1892, A., 1201.
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- **Indazine** (*indazole*) (Fischer and Kuzel), 1884, A., 441; (Fischer and Hepp), 1891, A., 1047.
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ψ-**Cumylbenzylidenehydrazine** (Ruhemann), 1890, T., 55.

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ψ-**Cumylhydrazine** (Haller), 1885, A., 523; (Ruhemann), 1890, T., 54.

ψ-**Cumylhydrazinepyruvic acid** (Ruhemann), 1890, T., 55.

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ψ-**Cumyloxamic acid,** and inner anhydride of (Mauthner and Suida), 1889, A., 140.

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_o_-**Cyanophenol** (Ahrens; Meyer), 1888, A., 266.
_p_-**Cyanophenol** (Klepl), 1884, A., 447.
_p_-**Cyanophenylacetamide** (Mellinghoff), 1890, A., 239.
_p_-**Cyanophenylacetic acid** (Mellinghoff), 1890, A., 239.
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"_di_**Cyano-*o*-phenylenediamine**" (Bladin), 1885, A., 257.
_p_-**Cyanophenylethenylamidoxime** (Rosenthal), 1890, A., 147.
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"_di_**Cyanophenylhydrazine**," action of ethylic acetoacetate on (Bladin), 1892, A., 597.
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γ-**Cyanopropylphthalimide** (Gabriel), 1890, A., 360.
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_m_-**Cyanoquinoline** (Fischer), 1883, A., 92.
_o_-**Cyanoquinoline** (Fischer), 1883, A., 92; (Lellmann and Reusch), 1889, A., 905.
_p_-**Cyanoquinoline** (Fischer and Wittmack), 1884, A., 1051.
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_di_**Cyanothiophen** (Jaekel), 1886, A., 339.
_di_**Cyano-*m*-*p*-tolenyldiamine,** and its derivatives (Bladin), 1885, A., 257.
ω-**Cyano-*p*-toluamide** (Mellinghoff), 1890, A., 239.
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ω-**Cyano-*p*-toluic acid** (Mellinghoff), 1890, A., 240.
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_o_-**Cyanotriphenylmethane** (Drory), 1891, A., 1461.
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γ-**Cyanovaleric acid** (Wislicenus), 1886, A., 880.
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  4:6-*di*bromo- (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1200.

m-**Cymene** (Me:Pr=1:3) (*m-propyltoluene*), 4:6-*di*bromo-2:5-*di*amido- (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1200.
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o-**Cymene** (Me:Pr=1:2) (*o-propyltoluene*), presence of, in resin spirit (Kelbe), 1886, A., 939.
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*m-iso***Cymene-6-sulphonic acid**, action of chlorine on (Kelbe), 1883, A., 806.
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*m-iso***Cymenol** (*m-isocymophenol*), and *tri*bromo-derivative (Jesurun), 1886, A., 696, 697.
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p-**Cymo-** and *p-iso***cymo-3:6-quinols** and **quinones**, 2:5-*di*bromo- (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1201, 1200.

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αβ-**Dibenzoylstyrene** (*anhydracetophenonebenzil*), preparation of (Japp and Klingemann), 1890, T., 672.
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  *o-di*chloro-*p-di*nitro- (Witt), 1892, A., 445.
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α-**Dibenzylhomo-*o*-phthalbenzylimide** (Pulvermacher), 1887, A., 1112.
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Dibenzylphosphinic acid (Letts and Blake), 1890, A., 767.

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ωω′-Dibenzylpimelic acid, dissociation constant of (Walker), 1892, T., 702.

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Dibenzylthiocarbamide, action of acetic anhydride on (Werner), 1891, T., 406.
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α-**Dibromhydrin**, preparation of (Aschan), 1889, A., 31.
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Di*iso*butylhexinene diketone (*diisobutyrone*) (Brüggemann), 1888, A., 1176.

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Di-ψ-amidine and its derivatives (Auwers), 1886, A., 144.

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Di-ψ-cumyl ethylene diketone (Claus and Schlarb), 1887, A., 827.

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1:2-**Diethoxybenzene** (*pyrocatechol diethyl ether*) (Herzig and Zeisel), 1889, A., 967.
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3:5-**Diethoxy-2:4:6-trimethylpyridine** (*diethoxycollidine*) (Pfeiffer), 1887, A., 845.

- *m*-**Diethoxyxylene** (Kipping), 1888, T., 45.
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- **Diethyl ketone** (*propione*) (Hamonet), 1889, A., 235.
  - preparation of, by Perkin's method (Perkin), 1886, T., 323.
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  - nitroso- (Claisen and Manasse), 1889, A., 585.
- **Diethyl thioketone** (Bergreen), 1888, A., 445.
- **Diethyl-acetamide** and **-acetanilide** (Freund and Herrmann), 1890, A., 473.
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- **Diethylacetic anhydride** and **chloride** (Freund and Hermann), 1890, A., 473.
- *αα'*-**Diethylacetonedicarboxylic acid** (Dünschmann and v. Pechmann), 1891, A., 674.
- **Diethylacetonitrile** (Freund and Herrmann), 1890, A., 474.
- **Diethylacetophenone** (Perkin), 1884, T., 185; (v. Baeyer and Perkin), 1884, A., 63.
- **Diethylacetothienone** and its oxime (Muhlert), 1886, A., 535.
- *β*-**Diethylacrylic acid** (*heptenoic acid*) (Reformatsky), 1891, A., 170.
- **Diethylæsculetin** (Will), 1884, A., 67.
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- **Diethylallylamine,** and its platino- and platini-chlorides (Liebermann and Paal), 1883, A., 909.
- **Diethylallylcarbinol,** glycerol from (Reformatsky), 1890, A., 121.
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- **Diethylallylthiocarbamide** (Gebhardt), 1885, A., 383; (Noah), 1890, A., 1241.
- *p*-**Diethylamidobenzaldehyde** (Boessneck), 1886, A., 458.
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- **Diethylamidocinnamic acid** (Fischer and Kuzel), 1884, A., 440.
- **Diethylamido-*n*-hexoic acid** (Duvillier), 1892, A., 294.
- **Diethylamidohydroxyphenyl*tri*chlorethane hydrochloride** (Boessneck), 1886, A., 458.
- **Diethylamidophenylarsine oxide** (Michaelis and Rabinerson), 1892, A., 1321.
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- **Diethyl*di*amidoquinoxazone** (Möhlau), 1892, A., 888.
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- **Diethylaniline,** *m*-nitro- (Groll), 1886, A., 347.
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m-**Diethylphenol** (Voswinkel), 1889, A., 39.
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αγ-**Diethylpyridine** (Ladenburg), 1886, A., 159; 1887, A., 60.
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2′:4′-**Dihydroxy-3′:4′-dihydroquinoline** (*hydroxyhydrocarbostyril*), 3-chloro- (Eichengrün and Einhorn), 1890, A., 1128; 1891, A., 1100.

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Dihydroxydiphenylamine (Seyewitz), 1890, A., 369.

Dihydroxydiphenylamine, *di*bromo- (Möhlau), 1884, A., 594.

o:p-**Dihydroxydiphenylcarbinol** (Michael), 1884, A., 311.

p-**Dihydroxydiphenyl*tri*chlorethane,** *di*- and *tetra*-nitro- (Elbs and Hoermann), 1889, A., 998.

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Dihydroxydiphenylpentane (Dianin), 1889, A., 1187.

Dihydroxydipropyldiphenylcarbamidedicarboxylic acid (Widman), 1884, A., 1023.

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p-**Dihydroxyethoxyquinone,** chloro- (Kehrmann), 1891, A., 904.

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p-**Dihydroxyethoxyquinoxaline** (Autenrieth and Hinsberg), 1892, A., 734.

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3:4-**Dihydroxy-1-ethylbenzene** (Sempotowski), 1890, A., 55.

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2′:4′-**Dihydroxy-3′-ethylquinoline** (Rügheimer and Schramm), 1888, A., 502.

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Dihydroxyhexoic acid lactone and salts of (Fittig and Hillert), 1892, A., 959.

*iso***Dihydroxyhexoic acid** lactone and salts of (Fittig and Hillert), 1892, A., 959.

o-**Dihydroxyhydrobenzoin** and di*eso*-anhydride of (Tiemann), 1892, A., 168, 167.

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o-**Dihydroxyhydrobenzoins,** isomeric (Tiemann), 1892, A., 167.

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  zinc chloride (Crismer), 1890, A., 558.

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Dihydroxymaleic acid, the so-called (Hendrixson), 1890, A., 958.

Dihydroxymesitylene (*mesitylenic glycol*) (Robinet and Colson), 1883, A., 1095.

2′:4′-**Dihydroxy-*p*-methoxy-3′:4′-dihydroquinoline** (Eichengrün and Einhorn), 1891, A., 1098.

Dihydroxymethylanthraquinone (*chrysophanic acid*) (Grandis), 1892, A., 1354.

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m-*α*-**Dihydroxymethylcoumarilic acid** (Lang), 1887, A., 263.

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4:6-**Dihydroxy-*β*-methylcoumarin** (v. Pechmann and Cohen), 1885, A., 57.

Dihydroxymethyldihydroquinolinecarboxylic acid (Królikowski and Nencki), 1888, A., 865.

2′:4′-**Dihydroxymethyl-3′-ethylquinoline** (Rügheimer and Schramm), 1887, A., 738; 1888, A., 502.

2′:4′-Dihydroxy-1-methylquinoline, 3′-chloro- (*chlorohydroxy-o-tolucarbostyril*) (Rügheimer and Hoffmann), 1886, A., 160.

Dihydroxy-2′-methylquinoline-derivatives, synthesis of (Conrad and Limpach), 1888, A., 853.

β-o-Dihydroxy-α-naphthaldehyde (Bradley and Dains), 1892, A., 1459.

1:4′-**Dihydroxynaphthalene** (Armstrong and Wynne), 1887, P., 43.

1:1′(?)-**Dihydroxynaphthalene** (Meldola and Hughes), 1890, T., 633.

1:3′-**Dihydroxynaphthalene** (Claus), 1889, A., 714.

2:2′-**Dihydroxynaphthalene** (Clausius), 1890, A., 627.
  1:1′-*di*chloro- and 1:3:3′:1′-*tetra*chloro- (Clausius), 1890, A., 629.

Dihydroxynaphthalene, action of, on blood (Lépine), 1888, A., 184.

Dihydroxynaphthalenedicarboxylic acid (Claus and Meixner), 1888, A., 612.

Dihydroxynaphthalenedisulphonic acid, sodium ammonium salt of (Witt), 1889, A., 273.

Dihydroxynaphthalenes, isomeric (Erdmann), 1889, A., 157.

Dihydroxynaphthalenes, 1:2′- and 2:3′- (Emmert), 1888, A., 57.

Dihydroxy-α-naphthaquinone (*hydroxyjuglone*) and its derivatives (Mylius), 1885, A., 803.

3:4-**Dihydroxy**-1:2-**naphthaquinone** (Bamberger and Kitschelt), 1892, A., 494; (Zincke), 1892, A., 720.

2″:3″-**Dihydroxynaphthaquinoxaline** (Kühling), 1892, A., 70.

Dihydroxynaphthoxanthones (Bener), 1892, A., 1100.

2′:2:1-**Dihydroxynaphthylamine** (Clausius), 1890, A., 628.

αβ-**Dihydroxynaphthylamine,** hydrochloride of (Korn), 1884, A., 1186.

Dihydroxy*iso***nicotinamide** (Ruhemann), 1888, A., 728.

Dihydroxy*di***nitroberberine** (Marfori), 1889, A., 628.

1:3-**Dihydroxy***di***nitrodiphenylamine** (Nietzki and Schündelen), 1892, A., 310.

p-**Dihydroxy***di***nitrodiphenyl***tri***chlorethane** (Elbs and Hoermann), 1889, A., 998.

Dihydroxyœnanthylphosphinic acid (Ville), 1889, A., 1135.

Dihydroxypentane [b.p. 260°] (*pentylenic glycol*) (Gustavson and Demjanoff), 1889, A., 950; (Demjanoff), 1892, A., 1292.

Dihydroxypentane [b.p. 260°] (*pentylenic glycol*), oxides of (Demjanoff), 1892, A., 1292.

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Dihydroxypentenecarboxylic acid, *di*chloro- (Hantzsch), 1888, A., 131; 1889, A., 853.
  *tri*chloro- (Hantzsch), 1888, A., 130; 1889, A., 853; (Hoffmann), 1889, A., 856.

Dihydroxyphenazine (Fischer and Hepp), 1890, A., 801.

Dihydroxyphenoquinone, *tetra*chloro*di*bromo- (Benedikt), 1883, A., 984.

Dihydroxyphenoxypropane (*phenylglycerol*) (Lindemann), 1891, A., 1198.

3:5-**Dihydroxyphenylacetic acid** (Cornelius and v. Pechmann), 1886, A., 802.

Dihydroxyphenylacrylic acid. See Caffeic acid.

αγ-**Dihydroxy**-γ-**phenylbutyric acid,** lactone of (Biedermann), 1892, A., 472.

βγ-**Dihydroxy**-γ-**phenylbutyric acid** (Fittig), 1888, A., 595; (Fittig and Obermüller), 1892, A., 986.

Dihydroxyphenylbutyrolactone, bromo- (Fischer and Stewart), 1892, A., 1447.

αβ-**Dihydroxyphenylpropionic acid.** See β-Phenylglyceric acid.

Dihydroxyphenylquinoline [m.p. 114°] (Weidel), 1887, A., 847.

p-**Dihydroxyphenylthiocarbamide** (Kalckhoff), 1883, A., 1110.

Dihydroxyphenylvaleric acid (Fittig and Mayer), 1892, A., 986.

Dihydroxyphosphinic acids (Ville), 1889, A., 1134; 1890, A., 618.

α′γ-**Dihydroxy**-α-**picoline** (Collie and Myers), 1892, T., 722.

α′β′-**Dihydroxy**-α-**picoline,** *di*- and *tri*chloro- (Hoffmann), 1889, A., 856.

Dihydroxypicoline *di***bromide** (Collie and Myers), 1892, T., 724.

Dihydroxypiperohydronic acids, αβ- and βγ- (v. Regel), 1887, A., 488.

Dihydroxypropanetricarboxylic acid, and its salts (Kiliani), 1885, A., 744.

αβ-**Dihydroxypropionic acid.** See Glyceric acid.

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2:6-**Dihydroxypyridine**, 4-amido-. See Glutazine.

Dihydroxypyridinecarboxylic acid (*oximidocomanic acid*) (Ost), 1884, A., 1302.

Dihydroxypyridinecarboxylic acid (*comenamic acid*) (Ost), 1883, A., 792.

2:4-**Dihydroxypyridine**-5- or 6 (?)- **carboxylic acid,** 3-nitro- (Bischoff), 1889, A., 519.

2:6-**Dihydroxypyridine-3-carboxylic acid.** See Citrazinic acid.

Dihydroxypyromellitic acid (*quinoltetracarboxylic acid*) (Nef), 1888, T., 453.

pyrazolone derivative of (Nef), 1890, A., 984.

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Dihydroxyquinoline (Lellmann), 1887, A., 973.

α-**Dihydroxyquinoline** [m.p. 130°—136°] (La Coste and Valeur), 1886, A., 629.

β-**Dihydroxyquinoline** [m.p. 68°] (La Coste and Valeur), 1886, A., 629; 1888, A., 297.

1:2′-**Dihydroxyquinoline** (*hydroxycarbostyril*) (v. Baeyer and Bloem), 1883, A., 197; (Friedländer and Weinberg), 1883, A., 351.

1:4-**Dihydroxyquinoline** (Claus and Posselt), 1890, A., 523.

1:1′-**Dihydroxyquinoline**, 2:4-*di*chloro- (Hebebrand), 1889, A., 61.

Dihydroxy*iso*quinoline, chloro- (Rügheimer), 1886, A., 702.

Dihydroxyquinolines, 2′:3′- and 2′:4′- (Friedländer and Weinberg), 1883, A., 351.

2′:4′-**Dihydroxyquinoline-3′-carboxylic acid** (Bischoff), 1889, A., 519.

2′:4′-**Dihydroxyquinoline-3′-oxime** (*quinisatoxime*) (v. Baeyer and Homolka), 1884, A., 1029.

2′:4′-**Dihydroxyquinolinesulphonic acid** (v. Baeyer and Bloem), 1883, A., 197.

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nitramido-, potassium salt of (Nietzki and Benckiser), 1885, A., 779.

2 : 5-**Dihydroxyquinone** (Nietzki and Schmidt), 1888, A., 1181.

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2:5-**Dihydroxyquinone**, 3:6- *di*amido- (Nietzki and Schmidt), 1888 A., 943.

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2:5-**Dihydroxyquinone**, 3-chloro-, action of aniline on (Kehrmann), 1890, A., 756.

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*di*imido- (Nietzki), 1884, A., 58.

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3:6-**Dihydroxyquinone** (Loewy), 1886, A., 1028.

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Dihydroxyquinonephenazine (Nietzki and Schmidt), 1888, A., 690.

Dihydroxyquinoxaline (Bladin), 1885 A., 257, 786.

Dihydroxysebacic acid (Claus and Steinkauler), 1888, A., 134.

Dihydroxyshikimic acid (Eijkman), 1891, A., 920.

Dihydroxystearic acid (Saytzeff), 1886, A., 140; (Spiridonoff), 1889, A., 123; (Gröger), 1889, A., 690.

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p-**Dihydroxystilbene** (Elbs and Hoermann), 1889, A., 997.

Dihydroxystilbenediamine (Japp and Hooker), 1884, T., 680.

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Dihydroxytartaric acid (*carboxytartronic acid*) (Kekulé), 1884, A., 41; (Miller), 1889, A., 1149.

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  - constitution of (Geuther), 1888, A., 579.
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- 3:6-**Dihydroxyterephthalic acid**, *di*bromo- (Böniger), 1888, A., 954.
  - *p*-*di*chloro- (Hantzsch and Zeckendorf), 1888, A., 278.
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- 2:3-**Dihydroxytoluene,** synthesis of (Limpach), 1892, A., 447.
- 2:4-**Dihydroxytoluene** (*cresorcinol*) from tolylenediamine (Wallach), 1883, A., 329.
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- 2:6-**Dihydroxytoluene** (Ullmann), 1884, A., 1317.
- 3:5-**Dihydroxytoluene.** See Orcinol.
- 2:4-**Dihydroxy**-1:3- or -1:5-**toluic acid** (*cresorcinolcarboxylic acid*) (v. Kostanecki), 1886, A., 242.
- 5:3-**Dihydroxy**-*o*-**toluic acid** (*cresorsellinic acid*), and its salts (Jacobsen and Wierss), 1883, A., 1121.
- 5:3-**Dihydroxy**-*p*-**toluic acid** (Weinreich), 1887, A., 669.
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  - constitution of (Kehrmann), 1890, A., 756.
- 3:6-**Dihydroxytoluquinone,** 5-nitro- (*tolunitranilic acid*) (Kehrmann), 1888, A., 940; (Kehrmann and Brasch), 1889, A., 969.
- **Dihydroxytoluquinoxaline** (Bladin), 1885, A., 785; (Hinsberg), 1886, A., 82.
- **Dihydroxytolylcarbamide** (Söderbaum and Widman), 1889, A., 972.
- *p*-**Dihydroxytriphenylmethane,** and its derivatives (Russanoff), 1889, A., 1188; 1891, A., 1234.
  - *m*-nitro- (de Varda and Zenoni), 1891, A., 1346.
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- **Dihydroxyundecylic acid** (Hazura and Grüssner), 1889, A., 375.
- **Dihydroxyvaleric acid** (*αβ-dimethylglyceric acid*) (Melikoff), 1886, A., 1009; 1887, A., 30; (Melikoff and Petrenko-Kritschenko), 1892, A., 297.
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- 2:4-**Dihydroxy**-*m*-**xylene** (*dimethylresorcinol*) (Wischin), 1891, A., 74.
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- 3:5-**Dihydroxy**-*p*-**xylene** (v. Kostanecki), 1887, A., 39.
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- 2′:4′-**Diketodihydroquinazoline** (Abt), 1889, A., 609.
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- *m*-**Diketohexamethylene,** *hepta*chloro- (Zincke and Rabinowitsch), 1891, A., 690.
- **Diketohexamethylene-dioxime** and -diphenylhydrazone (v. Baeyer and Noyes), 1889, A., 1147, 1148.
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- α-**Diketohexene,** *hexa*chloro- (Zincke), 1890, A., 964.
- *m*-**Diketohexene,** *hexa*chloro- (Zincke and Fuchs), 1892, A., 1461

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p-**Diketohexene,** *hexa*chloro- (ZINCKE and FUCHS), 1892, A., 447.
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α-**Diketohydrindene** (WISLICENUS), 1888, A., 1194; (WISLICENUS and KÖTZLE), 1889, A., 1067.
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o-**Diketohydronaphthalene,** *tetra*chloro-, its hydrates and alcoholates (ZINCKE and ARNST), 1892, A., 858.
2′:2-**Diketohydronaphthalene,** *deca*chloro- (CLAUSIUS), 1890, A., 629.
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1:3-**Dimethoxybenzene** (*resorcinyl dimethyl ether*), 4-amido-, and its derivatives (Bechhold), 1889, A., 1155.
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s-**Dimethyladipic acid** (Zelinsky; Auwers and Meyer), 1890, A., 132.
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Dimethylæsculetin (Tiemann and Will), 1883, A., 199.
Dimethylalloxanphenylhydrazone (Kühling), 1892, A., 442.
Dimethylalloxazine (Kühling), 1891, A., 1342.
Dimethylallylcarbinol, bye-product of the preparation of (Diëff), 1883, A., 1076.
  crude, an alcohol in (Poutokin), 1884, A., 1283.
  glycerol from (Reformatsky), 1890, A., 121.
Dimethyl-β-allylcarbinol (*dimethylisopropenylcarbinol*) (Chupotsky and Mariutza), 1890, A., 727.
  action of acids on (Mariutza), 1890, A., 728.
Dimethylallylene (*pentinene*), action of hydrogen chloride on (Kondakoff), 1889, A., 1127.
  conversion of, into *iso*propylacetylene (Faworsky), 1888, A., 1169.
  properties and transformations of (Albitzky), 1888, A., 797.
αβ-**Dimethylallylic alcohol** (Lieben and Zeisel), 1886, A., 784.
Dimethylamarine, formula of (Claus), 1883, A., 204.
s-**Dimethylamides** (Henry), 1885, A., 887.
Dimethylamidoazo-. See under Azo-.
p-**Dimethylamidobenzaldoxime** (Knöfler and Boessneck), 1888, A., 267.
Dimethylamidobenzamide (Knape), 1891, A., 910.
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Dimethyl- *mono-* and *-di*-**amidobenzhydrols** and their derivatives (Albrecht), 1889, A., 263, 264.
p-**Dimethylamidobenzoic acid**, nitroso-, and its derivatives (Bischoff), 1889, A., 511.
Dimethylamidobenzophenone, nitroso- (Bischoff), 1889, A., 511.
Dimethyl*di***amidobenzophenone**, *tetra*nitro- (van Romburgh), 1888, A., 1079, 1197.

p-**Dimethylamidobenzylidenephenylhydrazine** (Knöfler and Boessneck), 1888, A., 267.
β-**Dimethylamidocrotonanilide** (Knorr), 1892, A., 708.
Dimethylamidocyanuric acid and chloride (v. Hofmann), 1886, A., 40.
Dimethylamidodicarbimidoamidobenzoic acid (Griess), 1885, A., 1225.
Dimethylamidodiphenylamine (Fischer and Wacker), 1888, A., 1286.
  *di*nitro- (Lellmann and Mack), 1890, A., 1410.
Dimethyl*tri*amidodiphenylamine (Kehrmann and Messinger), 1892, A., 1109.
Dimethyl*di*amidodiphenylmethane (Albrecht), 1889, A., 264.
Dimethyl*tri*amidodiphenyltolylmethane (Nölting), 1891, A., 727; 1892, A., 189.
Dimethylamidohexylene (Tafel and Neugebauer), 1890, A., 1001.
Dimethylamidohydroquinoline hydrochloride (Ostermayer), 1885, A., 814.
Dimethylamidomethylhydroquinoline dimethiodide (Ziegler), 1888, A., 610.
Dimethylamidomethylphenazine (Bernthsen and Schweitzer), 1887, A., 139.
Dimethylamidomethylthiazole (Hantzsch and Weber), 1888, A., 257.
α-**Dimethylamido-α-naphtha-phenazine and -tolazine** (Eicker), 1891, A., 471.
Dimethyl-*m*-amidophenetoil (vom Baur and Staedel), 1883, A., 579.
Dimethylamidophenol, *di*nitro-, and its derivatives (Lippmann and Fleissner), 1886, A. 235.
Dimethyl-*m*-amidophenol, nitroso- (Möhlau), 1892, A., 887.
Dimethylamidophenyl hexyl ketone (Auger), 1887, A., 815.
Dimethylamidophenylarsine oxide and **sulphide** (Michaelis and Rabinerson), 1892, A., 1321.
Dimethylamidophenyl*tri*chloromethylcarbinol (Boessneck), 1885, A., 976.
Dimethylamidophenylethane (Heumann and Wiernik), 1887, A., 1039.
Dimethyl-*p*-amidophenylic ethylxanthate (Leuckart), 1890, A., 605.
Dimethylamidophenyl-phosphinous and **-phosphonic acids** (Schenk and Michaelis), 1888, A., 834.
Dimethylamidophenylphosphorous chloride (Schenk and Michaelis), 1888, A., 834.
Dimethylamidophenylquinoneimide (*phenol-blue*) (Möhlau), 1884, A., 594; 1886, A., 146; (Fogh), 1888, A., 592.
  *tri*chloro- (Möhlau), 1884, A., 595.
Dimethylamidopropionic acid (Duvillier), 1892, A., 1302.
Dimethylamidoquinoline (La Coste), 1883, A., 811.
Dimethyl*di*amidoquinoxaline (Nietzki and Müller), 1889, A., 604.
Dimethyl-*mono*- and -*di*-quinoxazones (Möhlau), 1892, A., 888.
Dimethylamidosulphonic chloride and its derivatives (Behrend), 1884, A., 285.
Dimethylamine, properties of (v. Hofmann), 1889, A., 688.
  heat of formation of (Muller), 1889, A., 811.
  action of bromine on (Raschig), 1885, A., 1195.
Dimethylamine chlororhodate (Vincent), 1886, A., 311.
  hydrogen diaminechromium thiocyanate (Christensen), 1892, A., 1000.
  platinothiocyanate (Guareschi), 1892, A., 286.
  vanadates (Bailey), 1884, T., 693, 694.
  nitro-, reduction of (Franchimont), 1885, A., 963.
Dimethylanhydracetonebenzil (Japp and Burton), 1887, T., 432; P., 32.
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  manufacture of (Schoop), 1887, A., 474; (Mühlhäuser), 1887, A., 576.
  preparation of (Reinhardt and Staedel), 1883, A., 578.
  refractive power of, at different temperatures (Perkin), 1892, T., 302.
  action of aluminium chloride on (Giraud), 1890, A., 137.
  action of benzoic chloride on (Hess), 1885, A., 783.
  action of carbon disulphide on, in presence of nascent hydrogen (Wiernik), 1889, A., 130.
  action of chloral hydrate on (Boessneck), 1885, A., 976.
  action of, on ethylene bromide (Hübner, Tölle and Athenstädt), 1884, A., 1317.
  action of œnanthaldehyde and heptylic chloride on, in presence of zinc chloride (Auger), 1887, A., 814.
  action of sulphur on (Möhlau and Krohn), 1888, A., 364,

Dimethylaniline, nitration of (Nölting and Collin), 1884, A., 1013; (Nölting), 1886, A., 543.
  derivatives of (Lauth), 1891, A., 457.
Dimethylaniline cyanhydrin, nitroso- (Lippmann and Fleissner), 1885, A., 1213.
  hydrochloride, action of *m*-nitrodiazobenzene chloride on (Meldola), 1884, T., 120.
  oxyalkyl derivatives of, reaction of (Grimaux), 1891, A., 693.
  platinochloride, preparation of (Reinhardt and Staedel), 1883, A., 578.
  *di*silicofluoride, *tri*nitroso- (Comey and Smith), 1888, A., 1283.
  sulphate (Vignon), 1888, A., 1282.
  *di*sulphide, *di*imido- (Bernthsen), 1889, A., 776.
Dimethylaniline, amido-. See Dimethylphenylenediamine.
  o- and *p*-chloro-, and their derivatives (Heidlberg), 1887, A., 474.
  m-nitro- (Groll), 1886, A., 347; (Staedel and Bauer), 1886, A., 941.
  p-nitro- (Lippmann and Fleissner), 1883, A., 1100; (Nölting and Collin), 1884, A., 1013.
  di- and *tri*-nitro- (van Romburgh), 1888, A., 1080.
  *isodi*nitro- (van Romburgh), 1887, A., 245.
  *penta*nitro-, non-existence of (van Romburgh), 1885, A., 660.
  nitroso-, action of hydrochloric acid on (Möhlau), 1886, A., 941.
    action of phenylhydrazine on (Fischer and Wacker), 1888, A., 1286.
    phenylmethylhydrazone of (Fischer and Wacker), 1889, A., 702.
  thio- (Holzmann), 1887, A., 723; (Michaelis and Godchaux), 1890, A., 610.
  *di*thio- (Merz and Weith), 1886, A., 792.
Dimethylanilinealloxan (Pellizzari), 1888, A., 682.
Dimethylanilineazobenzylpiperidine (Lellmann and Pekrun), 1891, A., 89.
Dimethylanilineazyline (Lippmann and Fleissner), 1883, A., 55, 185.
Dimethylanilinefurfural hydrochloride (Schiff), 1886, A., 612.
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Dimethylanilinesulphonic acid (Michaelis and Godchaux), 1890, A., 610.
Dimethylanilinisatin (v. Baeyer and Lazarus), 1886, A., 155.
Dimethyl-*o*-anisidine, action of nitric acid on (van Romburgh), 1892, A., 159.
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  mono- and *tri*-nitro- (Grimaux and Lefèvre), 1891, A., 1031.
Dimethylanthracene [m.p. 216°] (Elbs and Wittich), 1885, A., 518.
2:3-**Dimethylanthracene** (Elbs and Eurich), 1887, A., 841.
1:3-**Dimethylanthracene**, *di*bromo- (Elbs), 1890, A., 511.
Dimethylanthrachrysone (Cahn), 1886, A., 556.
"*m*-**Dimethylanthracylene**" (Elbs), 1890, A., 511.
Dimethylanthraflavic acid (*dihydroxydimethylanthraquinone*) and its acetyl- and benzoyl-derivatives (v. Kostanecki and Niementowski), 1885, A., 1240.
Dimethylanthragallol (*trihydroxydimethylanthraquinone*) (Birukoff), 1887, A., 592.
Dimethylanthramine (Bollert), 1883, A., 1139.
1:3-**Dimethylanthranol** (Elbs), 1890, A., 511.
Dimethylanthraquinone [m.p. 236°] (Anschütz and Romig), 1885, A., 768.
α-*m*-*β*-**Dimethylanthraquinone** (Elbs), 1886, A., 557.
1:4-**Dimethylanthraquinone** (Elbs), 1890, A., 512.
Dimethylanthraquinones, 1:3- and 2:3- (Elbs and Günther; Elbs and Eurich), 1887, A., 841.
Dimethylanthraquinonecarboxylic acid (Gresly), 1886, A., 1029.
Dimethylanthrarufin (*s-dihydroxydimcthylanthraquinone*) (v. Kostanecki and Niementowski), 1885, A., 531.
  distillation of, with zinc-dust (v. Kostanecki and Niementowski), 1885, A., 1240.
Dimethylanthrone (Hallgarten), 1888, A., 1202.
Dimethylapionole (*dimethoxydihydroxybenzene*) (Ciamician and Silber), 1889, A., 407; 1890, A., 35.
Dimethylapionylcarboxylic acid (Bartolotti), 1892, A., 1315.
Dimethylarsinic acid (*cacodylic acid*), action of, in the animal economy (Marshall and Green), 1886, A., 730.

Dimethylasparagine (Körner and Menozzi), 1890, A., 870.

Dimethylaziethane (Curtius and Thun), 1891, A., 1356.

Dimethylazobenzene, *tetra*nitro- (Mertens), 1886, A., 1022.

Dimethylbarbituric acid (*dimethylmalonylurea*) (Conrad and Guthzeit), 1883, A., 315.

Dimethylbenzaldehyde (Hinrichsen), 1889, A., 131, 391.

Dimethylbenzamide, nitro- (van Romburgh), 1886, A., 546.

Dimethylbenzidine, *tetra*nitro- (van Romburgh), 1887, A., 245.

2:2′-**Dimethylbenzimidazole** (Bamberger and Berlé), 1892, A., 632.

Dimethylbenzodihydroxyanthraquinone and its acetyl derivative (v. Kostanecki and Niementowski), 1885, A., 1240.

2:3-**Dimethylbenzoic acid** (*hemimellithylic acid*) (Jacobsen), 1887, A., 36.

2:4-**Dimethylbenzoic acid** (*xylic acid*), bromo- (Gunter), 1884, A., 1347.
  nitro- (Ahrens), 1892, A., 1437.
  3-nitro- (Claus), 1890, A., 980.
  3:5-*di*nitro- (Claus), 1890, A., 981.

2:5-**Dimethylbenzoic acid** (*p-xylic acid*), bromo-, and its salts (Gunter), 1884, A., 1347.

3:5-**Dimethylbenzoic acid** (*mesitylenic acid*), thermochemistry of (Stohmann, Kleber and Langbein), 1889, A., 1096.
  bromo-, preparation of, from bromomesitylene (Süssenguth), 1883, A., 469.
  *di*bromo-, and its salts (Süssenguth), 1883, A., 470.

o-m-**Dimethylbenzoylacetic acid** (Claus and Fickert), 1887, A., 253.

"αγ-**Dimethylbenzoylenecarbamide**" (Abt), 1889, A., 610.

o-p-**Dimethylbenzoyl-β-propionic acid** (Claus and Werner), 1887, A., 827.

Dimethylbenzoyl-ψ-cumidine methiodide (Fröhlich), 1885, A., 154.

Dimethylbenzyl salts (Hinrichsen), 1889, A., 391.

Dimethylbismuthine bromide and chloride (Marquardt), 1887, A., 802.
  hydroxide (Marquardt), 1887, A., 803.

Dimethylbromobenzeneazammonium compounds (Zincke and Arzberger), 1889, A., 502.

Dimethyl*di*bromoheptamethylene (Kipping and Perkin), 1891, T., 223.

Dimethylbromo*di*nitroresorcinol (Jackson and Warren), 1891, A., 1025.

Dimethyl*tri*bromonitroresorcinol (Jackson and Warren), 1891, A., 1026.

"**Dimethylbutylallylcarbinamine**" (Merling), 1891, A., 1506.

Dimethyl*iso*butylallylcarbinol (Schatzki), 1885, A., 237.

2:6-**Dimethyl-4-*iso*butylpyridine** (*isobutyllutidine*) (Engelmann), 1886, A., 260.

2:6-**Dimethyl-4-*iso*butylpyridine-3:5-dicarboxylic acid** (Engelmann), 1886, A., 260.

as-**Dimethylcarbamide** (van der Zande), 1889, A., 962.

Dimethylcarbazole (Täuber and Loewenherz), 1891, A., 835, 1491.
  *di*amido- (Täuber and Loewenherz), 1891, A., 834.

Dimethylcarbostyril (Knorr), 1888, A., 1111.
  o-, *m*- and *p*- (Knorr), 1888, A., 1112.

1′:4′-**Dimethyl-ψ-carbostyril** (Knorr), 1887, A., 159; (Knorr and Klotz), 1887, A., 278; (Reissert), 1892, A., 498.

Dimethylcarbostyrilsulphonic acid (Knorr), 1888, A., 1111.

Dimethyl*tri*chloracetamide (Cloëz), 1887, A., 1098.

Dimethyl-*m*-chloraniline and its salts (vom Baur and Staedel), 1883, A., 579.

Dimethylchloro*di*amidoethoxyquinone (Kehrmann), 1891, A., 904.

Dimethyl*tri*chlorobromobenzeneazammonium iodide (Zincke and Arzberger), 1889, A., 502.

p-α-**Dimethylcinchonic acid** (Pfitzinger), 1889, A., 413.

Dimethylcinchonine (Freund and Rosenstein), 1892, A., 892.

Dimethylcolchicinic acid (Zeisel), 1888, A., 614.

Dimethylcoumarilic acids (Hantzsch and Lang), 1886, A., 706.

β-5-**Dimethylcoumarin** (v. Pechmann and Cohen), 1885, A., 56.

Dimethylcoumarone (Hantzsch and Lang), 1886, A., 706.

Dimethyl-ψ-cumidine (v. Hofmann), 1883, A., 324.

Dimethylcyanidine, amido- (Tscherven-Iwanoff), 1892, A., 1291.

Dimethylcyanine iodide (Hoogewerff and van Dorp), 1885, A., 673.

Dimethyl-*n*- and -*iso*-cyanuric acids (v. Hofmann), 1886, A., 929, 930.

Dimethyldehydrothiotoluidine (Green), 1889, T., 230.
αα'-**Dimethyl**-*αα'*-**diacetylpentane** (Kipping and Mackenzie), 1890, P., 116; 1891, T., 570, 587.
  dioxime of (Kipping and Mackenzie), 1891, T., 588.
Dimethyldiazine (Stoehr), 1892, A., 507; (Dennstedt), 1892, A., 633.
2:6-**Dimethyl**-*m*-**diazine**, 4-amido-. See Cyanmethine.
Dimethyl-dicoumaric acid and **-dicoumarin** (Hantzsch and Zürcher), 1887, A., 830.
Dimethyldiethylammonium chloride and hydroxide, action of heat on (Collie and Schryver), 1890, T., 780.
Dimethyldiethylindamine thiosulphonate (Bernthsen), 1889, A., 778.
Dimethyldiethyl-*p*-**phenylenediamine** (Lippmann and Fleissner), 1884, A., 179.
  *di*iodomethylate (Lippmann and Fleissner), 1884, A., 178.
Dimethyldiethylphosphonium chloride, action of heat on (Collie), 1888, T., 720.
Dimethyldiethylsulphonamide (Behrend), 1884, A., 286.
Dimethyldihydrazimethylene (Curtius and Thun), 1891, A., 1356.
s-**Dimethyldihydroanthracene** (Anschütz and Romig), 1885, A., 768.
  synthesis of, from benzene and ethylidenic chloride (Angelbis and Anschütz), 1884, A., 753.
as-**Dimethyldihydroanthracene** (Hallgarten), 1888, A., 1202.
Dimethyldihydronaphthol (Cannizzaro), 1884, A., 327.
Dimethyldihydronaphthylpropionic acids (*dihydrosantinic acids*) (Gucci and Grassi-Cristaldi), 1892, A., 871.
Dimethyldihydropentene methyl ketone (Perkin and Stenhouse), 1892, T., 77.
  oxime of (Perkin and Stenhouse), 1892, T., 79.
Dimethyldihydropentenedicarboxylic acid (Perkin and Stenhouse), 1892, T., 81.
Dimethyldihydropyridine [b.p. 199°] (Gautier and Mourgues), 1888, A., 1315.
βγ-**Dimethyldihydroquinazoline** (Gabriel and Jansen), 1892, A., 218.
Dimethyldiketohexamethylene (v. Baeyer), 1892, A., 1183.
Dimethyldiketohydrindene (Wislicenus and Kötzle), 1889, A., 1068.
Dimethyldimethylenetrisulphone (Baumann), 1890, A., 1093.
Dimethyldipiperidyl [b.p. 265°], and its derivatives (Ladenburg), 1892, A., 1487.
Dimethyldipiperidyl [b.p. 230°—232°] and its derivatives (Liebrecht), 1887, A., 162.
*iso***Dimethyldipropyl***di***thioxamide** (Wallach and Reinhardt), 1891, A., 1008.
αα'-**Dimethyldipyridyl** (Heuser and Stoehr), 1891, A., 80.
ββ'-**Dimethyldipyridyl** (Stoehr and Wagner), 1892, A., 629.
"**Dimethyldiquinizinhydrobenzene**" (Knorr and Bülow), 1884, A., 1381.
Di-2'-methyldiquinolyl (Hinz), 1888, A., 39.
Dimethyldiquinolyl [m.p. 162°] (v. Miller), 1888, A., 966.
Dimethyldiquinolyl [m.p. 104°—105°] (Eliasberg and Friedländer), 1892, A., 1107.
p-**Dimethyldisalicylaldehyde** (Bradley and Dains), 1892, A., 1459.
Dimethyldisulphisethionic acid, sodium salt of (Engelcke), 1883, A., 972.
Dimethyldisulphobenzoic acid, salts of (Stengel), 1883, A., 1000.
Dimethylenedisulphone, derivatives of (Autenrieth), 1887, A., 463.
Dimethylenedi-*p*-**toluidine** (Grünhagen), 1890, A., 888.
Dimethylenemethane (Gustavson and Demjanoff), 1889, A., 30.
Dimethylenethane, preparation and oxidation of (Armstrong and Miller), 1886, T., 81.
Dimethylenethylenedisulphone (Fasbender), 1888, A., 805.
1:4-**Dimethyl-6-ethylaniline** (Hodgkinson and Limpach), 1892, T., 420; P., 56.
Dimethylethylazimethylene (Curtius and Thun), 1891, A., 1355.
1:3-**Dimethyl-5-ethylbenzene** (Anschütz and Romig), 1885, A., 769; (Jacobsen), 1887, A., 37; (Töhl and Geyger), 1892, A., 969.
1:2-**Dimethyl-4-ethylbenzene.** See Laurene.
Dimethylethylcarbinol. See *tert*-Amylic alcohol.
2':3'-**Dimethyl-1'-ethyl-1':2'-dihydroquinoline** (Fischer and Steche), 1887, A., 976.
Dimethylethylenediamine (Angeli), 1890, A., 954.

Dimethylethylenedisulphone (Otto and Casanova), 1888, A., 255.
Dimethylethylene-*o*-phenylenediamine and its derivatives (Ris), 1888, A., 468.
s-**Dimethylethylenic oxide** (*ψ-butylenic oxide*) (Eltekoff), 1883, A., 567.
2′:3′-**Dimethyl-1′-ethylindole** (Wolff), 1889, A., 259.
Dimethylethylnaphthalene (Gucci and Grassi-Cristaldi), 1892, A., 872.
Dimethylethylphosphine (Collie), 1888, T., 720.
Dimethylethylpiperidine (Jaeckle), 1888, A., 1104.
Dimethylethylpyridine (*parvoline*) (Dürkopf and Schlaugk), 1888, A., 607.
preparation of (Hesekiel), 1886, A., 257.
2:6-**Dimethyl-4-ethylpyridine** and salts of (Engelmann), 1886, A., 259.
oxidation of (Altar), 1887, A., 379.
2:6-**Dimethyl-4-ethylpyridine-3:5-dicarboxylic acid** (Engelmann), 1886, A., 259.
3:3′-**Dimethyl-2′-ethylquinoline** and its derivatives (Harz), 1886, A., 261.
3:3′-**Dimethyl-2′-ethylquinoline-1-carboxylic acid** (v. Miller), 1890, A., 1327.
Dimethylethylsuccinic acid (Bischoff and Mintz), 1890, A., 743; 1891, A., 290; (Bischoff), 1891, A., 829.
Dimethylethylsulphine, preparation of (Carrara), 1892, A., 1422.
and its derivatives (Klinger and Maassen), 1888, A., 357.
Dimethylethylthymoquinol (Reychler), 1892, A., 1312.
Dimethylformamide, platinochloride of (Pinner), 1883, A., 1089.
Dimethylformamidine, and its hydrochloride (Pinner), 1883, A., 731.
*iso***Dimethylformamidine hydrochloride** (Pinner), 1883, A., 1090.
Dimethylfraxetin (Körner and Biginelli), 1892, A., 628.
Dimethylfurfurancarboxylic acid. See Pyrotritaric acid.
Dimethylfurfurandicarboxylic acid. See Carbopyrotritaric acid.
Dimethylgentisic acid (Schnell), 1887, A., 140.
Dimethylgentisic aldehyde (Schnell), 1884, A., 1166.
Dimethylglutaric acid, relative properties of trimethylsuccinic acid and (Zelinsky and Besredka), 1891, A., 669.
αα-**Dimethylglutaric acid** (Auwers and Jackson), 1890, A., 1099.
s-**Dimethylglutaric acid** (Bischoff), 1890, A., 1099; (Auwers and Köbner), 1891, A., 1015.
Dimethylglutaric acids (Guthzeit and Dressel), 1890, A., 878; (Auwers and Köbner), 1891, A., 1016.
s-**Dimethylglutaric acids**, isomeric (Zelinsky), 1890, A., 132.
αα-**Dimethylglutaric anhydride** (Auwers and Jackson), 1890, A., 1099.
*αα-di*bromo- (Auwers and Jackson), 1890, A., 1099.
αβ-**Dimethylglyceric acid.** See Dihydroxyvaleric acid.
αβ-**Dimethylglycidic acid** (Melikoff), 1886, A., 1009; 1888, A., 1177.
Dimethylglycolurile (Franchimont and Klobbie), 1888, A., 1180; 1889, A., 126.
Dimethylglyoxaline (*oxalmethylethyline*), synthesis of (Radziszewski), 1883, A., 728.
Dimethylglyoxime peroxide (Scholl), 1891, A., 316.
Dimethylheptamethylene (Kipping and Perkin), 1891, T., 227.
o-**Dimethylheptamethylene** (Kipping and Perkin), 1889, P., 145.
*di*bromo- (Kipping and Perkin), 1889, P., 145.
Dimethylheptamethylenic diacetate (Kipping and Perkin), 1891, T., 225.
glycol (Kipping and Perkin), 1891, T., 217.
α-**Dimethylheptylethylene** (*nonylene*) (Freund and Schönfeld), 1892, A., 133.
Dimethylhexadecylbenzene (Krafft and Göttig), 1889, A., 130.
2:6-**Dimethylhexahydropyridine** (*lupetidine*) (Ladenburg), 1887, A., 64.
and allied substances, relation between the physiological action and chemical constitution of (Gürber), 1891, A., 854.
Dimethylhexylazimethylene (Curtius and Thun), 1891, A., 1355.
Dimethylhexylcarbinol (*nonylic alcohol*) (Freund and Schönfeld), 1892, A., 133.
Dimethylhexyl-hexahydropyridine and -pyridine (Jaeckle), 1888, A., 1104.
Dimethylhomogentisic acid (Wolkow and Baumann), 1891, A., 1129.
Dimethylhomo-*o*-phthalimide (Gabriel), 1887, A., 51, 726.

- **Dimethylhomopyrocatechol** (Goldschmiedt), 1884, A., 186.
- 2:4-**Dimethylhydropyridine** (Ladenburg and Roth), 1885, A., 816.
- **Dimethylic** acetylenedicarboxylate (v. Bandrowski), 1883, A., 313.
  - amidocyanurate (v. Hofmann), 1886, A., 930.
  - barium phosphate (Lossen and Köhler), 1891, A., 1015.
  - berberilate (Perkin), 1890, T., 1050.
  - camphorate (Walker), 1892, T., 1092; (Brühl), 1892, A., 1102.
  - carbopyrotritarate (Knorr and Cavallo), 1889, A., 385.
  - carboxycarbamate (Franchimont and Klobbie), 1889, A., 1144.
  - *di*chloroglycollate (Anschütz), 1890, A., 236.
  - diacetylracemate, molecular weight of (Anschütz), 1888, A., 1273.
  - diethylic oxalate (Anschütz), 1890, A., 236.
  - $\Delta_{1,4}$-dihydroterephthalate, heats of combustion and formation of (Stohmann and Kleber), 1891, A., 376.
  - dipropylic glycol (Marshall and Perkin), 1890, P., 138; 1891, T., 875.
  - fumaroid-hexahydroterephthalate, heats of combustion and formation of (Stohmann and Kleber), 1891, A., 376.
  - succinosuccinate (Ebert), 1885, A., 1122.
  - α-sulphaminephthalate (Moulton), 1891, A., 1063.
  - terephthalate and Δ_1-tetrahydroterephthalate, heats of combustion and formation of (Stöhmann and Kleber), 1891, A., 376.
- **Dimethylimidomethylthiazoline** (Traumann), 1889, A., 415.
- **Dimethylimidothiazoline** (Näf), 1891, A., 1516.
- **Dimethylindamine thiosulphonate** (Bernthsen), 1889, A., 778.
- 2′:3′-**Dimethylindazole** (*dimethylindazine*) (Fischer and Tafel), 1885, A., 542.
- 1′:3′-**Dimethyl*iso*indazole** (Fischer and Tafel), 1885, A., 543.
- βγ-**Dimethylindene**, *m*-amido- (v. Miller and Rohde), 1890, A., 1138.
- **Dimethylindigo** (Flimm), 1890, A., 383.
  - synthesis of (Eckenroth), 1891, A., 722.
- 2:2′-**Dimethylindole** (Raschen), 1887, A., 956.
- 2′:3′-**Dimethylindole** (Fischer), 1886, A., 805; 1887, A., 149; (Wolff), 1888, A., 371.
- 4:1′-**Dimethylindole** (Hegel), 1886, A., 552.
- **Dimethylindoles** (Fischer), 1887, A., 148.
- **Dimethylindoles**, 1′:2′- and 1′:3′- (Degen), 1887, A., 149.
- **Dimethylindoleacetic acid** (Fischer), 1886, A., 806.
- 1′:2′-**Dimethylindole-1′-carboxylic acid** (Fischer), 1886, A., 806; (Degen), 1887, A., 149.
- 2:1′-**Dimethylindole-2-carboxylic acid** (Hegel), 1886, A., 552.
- 4:1′-**Dimethylindole-2′-carboxylic acid** (Hegel), 1886, A., 552.
- **Dimethyliodamine** (Raschig), 1886, A., 44.
- **Dimethylketol** (v. Pechmann), 1889, A., 1137; (v. Pechmann and Dahl), 1890, A., 1234.
- **Dimethylketopentene** (Dietzel), 1889, A., 594.
- **Dimethyllactamidine hydrochloride** (Pinner), 1891, A., 63.
- **Dimethyllevulinic acid** (Zelinsky), 1887, A., 921.
- α-**Dimethyllevulinic acid** (*mesitonic acid*) (Anschütz and Gillet), 1888, A., 1272.
- *s*-**Dimethylmaleic acid** (*pyrocinchonic acid*) (Roser), 1883, A., 98.
  - from α-*di*chloropropionic acid (Otto and Beckurts), 1885, A., 753.
  - relation of, to the dimethylsuccinic acids (Bischoff and Voit), 1890, A., 743.
  - anhydride of (Rach), 1886, A., 1012.
    - preparation of (Michael and Tissot), 1891, A., 1456; (Fittig and Parker), 1892, A., 814.
    - action of phenylhydrazine on (Otto and Holst), 1890, A., 1327.
- *s*-**Dimethylmaleic** α- and β-**phenylhydrazines** (Otto and Holst), 1890, A., 1327.
- **Dimethylmaleinfluorescein** (Burckhardt), 1886, A., 51.
- **Dimethylmalonamide** (Freund), 1884, A., 728.
  - *di*bromo- (Freund), 1884, A., 1124.
  - *di*nitro- (Franchimont), 1886, A., 449.
- **Dimethylmalonic acid** (*isopyrotartaric acid*) (Carette), 1886, A., 335, 611; (Gorboff), 1888, A., 1179.
  - specific heat of (Hess), 1889, A., 93, 94.
  - thermochemistry of (Stohmann, Kleber and Langbein), 1889, A., 1097.

o-p-**Dimethylmandelic acid** (Claus), 1890, A., 979.

Dimethylmethylenethylene *di***sulphide** (Fasbender), 1888, A., 805.

Dimethylmethylenehydrazine (Curtius and Pflug), 1892, A., 457.

Dimethylmethyleneimidosulphonic acid (Krafft and Bourgeois), 1892, A., 701.

Dimethylmethylenesulphone (Baumann and Kast), 1889, A., 1232.

Dimethylmethylene*di***thioglycollic acid** (Bongartz), 1888, A., 479.

Dimethyl-β-methylumbellic acid (*dimethoxyphenylcrotonic acid*) (v. Pechmann and Cohen), 1884, A., 1331.

Dimethylnaphthaeurhodine (Witt), 1888, A., 491; (Eicker), 1891, A., 471.

Dimethylnaphthalene [b.p. 265°] (Cannizzaro and Carnelutti), 1883, A., 79; (Cannizzaro), 1884, A., 328.

Dimethylnaphthaloxazine (Kühling), 1892, A., 70.

Dimethyl-α-naphthaquinoline (Reed), 1887, A., 681; (Combes), 1888, A., 968.

Dimethyl-β-naphthaquinoline (Combes), 1888, A., 968.

2′:4′-**Dimethyl-β-naphthaquinoline** (Reed), 1886, A., 370; 1887, A., 681.

Dimethyl-β-naphthaquinolinesulphonic acid (Reed), 1887, A., 681.

2″:3″-**Dimethyl-α-naphthindole** (Wolff), 1889, A., 259.

2″-3″-**Dimethyl-β-naphthindole** (Steche), 1888, A., 285; (Wolff), 1889, A., 259.

Dimethylnaphthol (Cannizzaro and Carnelutti), 1883, A., 79.

2:6-**Dimethylnicotinic acid** (*dimethylpyridinecarboxylic acid*) (Weiss), 1886, A., 720.

Dimethyl*di***nitro***di***amidobenzophenone**, *tetra*nitro- (van Romburgh), 1888, A., 1079, 1196.

Dimethylnitropyrrylene diketone (Ciamician and Silber), 1886, A., 74, 718.

Dimethylnitrosamine (van Romburgh), 1887, A., 230.

Dimethylorcinol dimethyl ether (Kraus), 1891, A., 1347.

Dimethylorcinols (Kraus), 1891, A., 1347.

Dimethyloxamide (Maly and Andreasch), 1883, A., 1018.
  *di*nitro- (Franchimont), 1886, A., 448.

αγ-Dimethyl*iso***oxazole**, reduction of (Claisen), 1892, A., 507.

Dimethyloxetone (Fittig and Rasch), 1890, A., 868.

Dimethyloxetonecarboxylic acid (Fittig and Rasch), 1890, A., 868.

Dimethyloximidohexoic acid (Kipping and Mackenzie), 1891, T., 586.

Dimethyloxindole (Wispek), 1883, A., 1096.

Dimethyloxydihydrotoluquinoxaline (Hinsberg), 1889, A., 280.

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3:5-**Dimethylpentamethylenemethylcarbinol** (Perkin and Stenhouse), 1892, T., 79.

Dimethylpentanetetracarboxylic acid (Perkin and Prentice), 1891, T., 830.
  dissociation-constant of (Walker), 1892, T., 704.

Dimethylphenanthroline (v. Miller), 1891, A., 1105.

Dimethylphenylacetic acid, α-nitro-, and its salts (Wispek), 1883, A., 1096.

Dimethylphenylenediamine (*amidodimethylaniline*), action of aldehydes on (Calm), 1885, A., 387.

Dimethyl-*m***-phenylenediamine** (Groll), 1886, A., 347; (Staedel and (Bauer), 1886, A., 941.
  (?)2:4:6-*tri*nitro- (van Romburgh), 1888, A., 1185.

Dimethyl-*o***-phenylenediamine**, 4-nitro- (Heim), 1888, A., 1097.

Dimethyl-*p***-phenylenediamine** (Meldola), 1884, T., 108; (Nölting and Baumann), 1885, A., 385.
  action of, on aldehydes (Nuth), 1885, A., 784.
  action of, on ketones (Vogtherr), 1892, A., 854.

Dimethylphenylenediamine mercaptan (Bernthsen), 1889, A., 775.

Dimethylphenylenediaminethiosulphonic acid (Bernthsen), 1889, A., 776.

Dimethylphenylene-green and **-safranine** (anon.), 1884, A., 539.

p-**Dimethyl-***o***-phthalic acid** (Gucci and Grassi-Cristaldi), 1892, A., 872.

Dimethylphthalide (Kothe), 1889, A., 257.

Dimethyl-*o***-phthalyldi-***d***-ecgonine** (Deckers and Einhorn), 1891, A., 476.

2:4-**Dimethylpicolinic acid** (*dimethylpyridinecarboxylic acid*) (Altar), 1887, A., 378.

αα′-Dimethylpimelic acid (Kipping and Mackenzie), 1890, P., 117; 1891, T., 570, 577, 587; (Perkin and Prentice), 1891, T., 832.

ωω′-Dimethylpimelic acid, dissociation constant of (Walker), 1892, T., 701.

Dimethylpimelic acids, stereoisomeric (Zelinsky), 1892, A., 430.
Dimethyl-α-pipecolylammonium iodide (Merling), 1891, A., 1508.
Dimethylpiperazine [b.p. 153°—158°] (Schmidt and Wichmann), 1892, A., 212.
γ-**Dimethylpiperazine** (Ladenburg), 1891, A., 1333.
1:2-**Dimethylpiperidine** (*methyl-α-pipecoline*) (Ladenburg), 1883, A., 1154.
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2:6-**Dimethyl-4-propylhexahydropyridine** (*propyllupetidine*) (Jaeckle), 1888, A., 1104.
2:6-**Dimethyl-4-propylpyridine** (*propyllutidine*) (Jaeckle), 1888, A., 1104.
Dimethylpropylpyridinedicarboxylic acid (*propyllutidinedicarboxylic acid*) (Jaeckle), 1888, A., 1104.
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  isolation of (Ladenburg and Roth), 1885, A., 815.
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  *di*bromo- (Pfeiffer), 1887, A., 845.
2:5-**Dimethylpyridine** (Lunge and Rosenberg), 1887, A., 499.
2:6-**Dimethylpyridine** (Ladenburg and Roth), 1885, A., 557; (Epstein), 1885, A., 815; 1886, A., 258; (Roth and Lange), 1886, A., 558; (Ladenburg), 1887, A., 59; (Collie), 1891, T., 177.
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2:6-**Dimethylpyridine,** oxidation of (Collie), 1891, T., 178.
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  4-chloro-, and its derivatives (Conrad and Epstein), 1887, A., 501.
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2:4-**Dimethylpyridine-3-carboxylic acid** (2:4-*lutidine-3-carboxylic acid*) (Michael), 1885, A., 1244.
2:4-**Dimethylpyridine-6-carboxylic acid** (*dimethylpicolinic acid*) (Altar), 1887, A., 378.
2:6-**Dimethylpyridine-5-carboxylic acid** (2:6-*dimethylnicotinic acid*) (Weiss), 1886, A., 720.
2:4-**Dimethylpyridine-3:5-dicarboxylic acid** (Dürkopf and Göttsch), 1890, A., 1002.
2:4-**Dimethylpyridine-3:6- or -5:6-dicarboxylic acid** and its salts (Michael), 1885, A., 62.
2:6-**Dimethylpyridine-3:5-dicarboxylic acid** (Engelmann), 1886, A., 259.
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2:4-**Dimethylpyridinetricarboxylic acid** and its salts (Hantzsch), 1883, A., 85.
2:6-**Dimethylpyridone** (*lutidone*) (Conrad and Guthzeit), 1887, A., 508; (Collie), 1891, T., 177.
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2:6-**Dimethylpyridone-3-carboxylic acid** (Collie), 1891, T., 176.
2:6-**Dimethylpyridone-3:5-dicarboxylic acid** (Conrad and Guthzeit), 1887, A., 500.
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2:5-**Dimethylpyrroline** (Knorr), 1884, A., 1368; 1885, A., 995; (Dennstedt), 1889, A., 1209.
αβ′-**Dimethylpyrroline,** molecular weight of (Magnanini), 1890, A., 906.
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2:4-**Dimethylpyrroline-3-carboxylanilide** (Knorr), 1887, A., 277.
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2:4-**Dimethylpyrroline-5-carboxylic acid** (Magnanini), 1889, A., 409.
2:5-**Dimethylpyrroline-4-carboxylic acid** and its salts (Knorr), 1885, A., 994.
2:4-**Dimethylpyrroline-3:5-dicarboxyacetic acid** (Knorr), 1887, A., 276.
2:4-**Dimethylpyrroline-3:5-dicarboxylic acid,** *mono-* and *di*-anilides of (Knorr), 1887, A., 277.
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2:5-**Dimethylpyrroline-3:4-dicarboxylic acid** and its salts (Knorr), 1885, A., 994.
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2:4-**Dimethylpyrryl styryl ketone** (Dennstedt), 1889, A., 1209.
2:5-**Dimethylpyrryl-*m*-benzoic acid** (Paal and Schneider), 1886, A., 559.
Dimethylpyrrylene diketone (*di-ψ-acetylpyrroline*) (Ciamician and Dennstedt), 1885, A., 378; (Ciamician and Silber), 1885, A., 808, 993; 1886, A., 74.
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2:5-**Dimethylpyrryl-*o*-phenol** (Paal and Schneider), 1886, A., 559.
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1:2′-**Dimethylquinoline** (*o-toluquinaldine*), oxidation of (v. Miller), 1891, A., 1095.
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1:3-**Dimethylquinoline** (*xyloquinoline*), 4-amido- (Nölting and Trautmann), 1891, A., 328; 1892, A., 729.
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2′:3′-**Dimethylquinoline** (Rohde), 1887, A., 974; 1889, A., 523; (Eliasberg and Friedländer), 1892, A., 1107.
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3:4- or 2:3-**Dimethylquinoline,** and its derivatives (Berend), 1884, A., 1197.
3:4′-**Dimethylquinoline** (4′-*methyl-β-toluquinoline*) (v. Miller), 1890, A., 1325.
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o-p-**Dimethylquinoline-*α*-carboxylic aldehyde** (Panajotow), 1890, A., 1158.
1:3-**Dimethylquinolinesulphonic acid** (Panajotow), 1887, A., 382.
1:4-**Dimethylquinolinesulphonic acids** (1:4-*xyloquinolinesulphonic acids*) (Nölting and Frühling), 1889, A., 164.

1′:2′-**Dimethyl**-4′-**quinolone** (*dimethyl-ψ-quinoxyl*). See 4′-Hydroxy-1′:2′-dimethylquinoline.
1′:4′-**Dimethylquinolone** (*methyllepidone*) (Knorr), 1887, A., 159.
  dyes obtained from (Reissert), 1892, A., 498.
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1:3-**Dimethylquinolyl-α-acrylic acid** (Panajotow), 1887, A., 382.
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3′:4′-**Dimethylquinoxaline**, *tetra*chloro- (Levy, Witte and Curchod), 1890, A., 232.
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  bromo- and chloro- (Wischin), 1891, A., 74.
Dimethylresorcyl pentadecyl ketone (Krafft), 1888, A., 1087.
Dimethyl-α-resorcylic acid, amido- and nitro- (Meyer), 1888, A., 148.
Dimethyl-β-resorcylic acid (v. Pechmann and Duisberg), 1884, A., 67; (v. Pechmann and Cohen), 1884, A., 1331.
Dimethylrubbadin (Schall and Uhl), 1892, A., 1077.
Dimethylsafranine hydrochloride (Menton), 1891, A., 1205.
p-**Dimethylstilbene** (Anschütz and Wirtz), 1885, T., 901; A., 1064.
Dimethylstilbene sulphide, *di*amido- (Anschütz and Schultz), 1889, A., 602.
Dimethylstrychnine (Tafel), 1890, A., 1448.
*iso***Dimethylstrychnine** (Tafel), 1891, A., 1264.
3-**Dimethylsuccinamic acid**, *α-di*chloro- (Otto and Holst), 1890, A., 958.
Dimethyl*iso*succinamide (Franchimont), 1886, A., 449.
Dimethylsuccinic acid (Bischoff and Jaunsnicker), 1891, A., 290.
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s-**Dimethylsulphonamide,** *di*nitro- (Franchimont), 1885, A., 969.

Dimethylsulphonamides, action of nitric acid on (Franchimont), 1885, A., 969.

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Dimethyl-tartaramide and **-tartarimide,** *tetra*chloro- (Levy, Witte and Curchod), 1890, A., 233.

Dimethyltaurine, preparation of (James), 1885, T., 370.

β-**Dimethyltaurine** and **dimethyltaurocarbamic acid** (Gabriel), 1890, A., 128.

Dimethyltaurocyamine, formation of (James), 1885, T., 374.

2:5-**Dimethylterephthalic acid** (Claus), 1890, A., 982.

2:6-**Dimethylterephthalic acid** (Claus), 1890, A., 981.

Dimethyl-α-tetrahydronaphthylamine (Bamberger and Helwig), 1889, A., 892.

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1:2-**Dimethyl-Δ^2-tetrahydropyridine** (Lipp), 1892, A., 1243.

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1:2′-**Dimethyltetrahydroquinoline** (Doebner and v. Miller), 1884, A., 183; (Möller), 1888, A., 297.

1:3-**Dimethyltetrahydroquinoline** (Bamberger and Wulz), 1891, A., 1255.

1′:3′-**Dimethyltetrahydroquinoline** (Fischer and Steche), 1887, A., 976.

1:4-**Dimethyltetrahydroquinoline** (Berend), 1886, A., 261.

1′:4′-**Dimethyltetrahydroquinoline** (Knorr and Klotz), 1887, A., 279.

Dimethyltetrahydroquinolinium hydroxide (Feer and Koenigs), 1885, A., 1245.

αβ′-**Dimethyltetramethylenediamine** (Ciamician and Zanetti), 1890, A., 1155; 1891, A., 1503.

as-**Dimethyltetraphenylethane** (Willgerodt and Schiff), 1890, A., 959.

Dimethylthalline iodide, quaternary (Skraup), 1886, A., 80.

Dimethylthetin-*mono*- and **-*di*-carboxylic acids** (Delisle), 1892, A., 1433.

αα′-**Dimethylthiazole** (Hantzsch), 1888, A., 574.

αμ-**Dimethylthiazole** (Hantzsch), 1889, A., 723.

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as-**Dimethylthiocarbamide** (Spica and Carrara), 1892, A., 216.

Dimethylthioformaldinium iodide (Wohl), 1887, A., 28.

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2:3-**Dimethylthiophen** (Paal), 1887, A., 1101; (Grünewald), 1888, A., 48.

2:4-**Dimethylthiophen** and its derivatives (Zelinsky), 1887, A., 921.

2:5-**Dimethylthiophen,** synthesis of (Paal), 1885, A., 1205.
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3:4-**Dimethylthiophen** (Zelinsky), 1888, A., 939.

2:4-**Dimethylthiophen-5-carboxylic acid** (Gattermann), 1888, A., 575.

Dimethylthioresorcinol (Obermeyer), 1888, A., 124.

Dimethyl*di*thiotetrahydrotriazole (Hector), 1892, A., 293.

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Dimethyltolenylamidine salts (Glock), 1888, A., 1290.

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Dimethyl-*p*-toluidine, action of, on ethylenic bromide (Hübner, Tölle and Athenstädt), 1884, A., 1317.

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αβ-Dimethylumbelliferonecarboxylic acid (v. Pechmann), 1892, A., 432.
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αβ-Dinaphthyl (Wegscheider), 1884, A., 1185.
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β-Dinaphthyl ketone, boiling point of (Schweitzer), 1891, A., 1240.
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αβ-Dinaphthylamine, behaviour of, when combining with diazobenzene (Matthes), 1890, A., 385.
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α-Dinaphthyl-αγ-diketopiperazine (Bischoff and Nastvogel), 1889, A., 1015; (Bischoff and Hausdörfer), 1890, A., 1309.
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αβ-**Dinaphthylic** sulphide (Krafft), 1890, A., 1312.
  *di*sulphide, *di*amido- ($NH_2:S=1:3'$) (Ekbom), 1891, A., 573.
  *di*sulphide, *di*amido- ($NH_2:S=1:4'$) (Ekbom), 1890, A., 994.
αα-**Dinaphthylic sulphoxide** (Ekstrand), 1885, A., 171; (Krafft), 1890, A., 1311.
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Di-β-naphthylketoneoxidesulphonic acid, barium salt of (Claus and Ruppel), 1890, A., 510.
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α-Dinaphthylparabanic acid (Evers), 1888, A., 602.
β-Dinaphthylphenylcarbamide (Gebhardt), 1885, A., 384; (Kühn and Landau), 1890, A., 634.
  thio- (Paschkowetzky), 1892, A., 166.
α-Dinaphthylphenylcarbinol (Elbs and Steinike), 1886, A., 947; (Elbs), 1887, A., 943.

β-**Dinaphthyl-*p*-phenylenediamine** and its derivatives (RUEFF), 1889, A., 894.
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α-**Dinaphthylpiperazine** (BISCHOFF), 1889, A., 1011.
β-**Dinaphthylpiperazine** (BISCHOFF and HAUSDÖRFER), 1890, A., 1333.
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o-**Diphenol** (Hodgkinson and Matthews), 1883, T., 169; (Limpricht), 1891, A., 930.

p-**Diphenol**, derivatives of (Schütz), 1889, A., 402.
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γ-**Diphenoxypropylamine** (Lohmann), 1891, A., 1467.

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  *di*amido- [m.p. 125°] (Bernthsen), 1886, A., 471.
  *m:m-di*amido- [m.p. 257°] (Brunner and Witt), 1887, A., 673.
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  *p:p-di*amido- [m.p. 122°]. See Benzidine.
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  *per*chloro- (Merz and Weith), 1884, A., 589.
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*iso***Diphenylacetonitrile** (Anschütz and Romig), 1886, A., 1034.

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αβ-Diphenyl-μ-amidothiazole (Hubacher), 1891, A., 222.

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  *tri*nitro- (Norton and Allen), 1885, A., 1214.
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  *di*thio- (Holzmann), 1888, A., 1080.
Diphenylaminealloxan (Pellizzari), 1888, A., 682.
Diphenylamine-*o*-carboxylic acid, *di*nitro-, and its derivatives (Jourdan), 1885, A., 988.
Diphenylamine-*p*-carboxylic acid, *m*-nitro- (Schöpff), 1890, A., 374.
Diphenylamine-*o*:*p*-disulphonic acid (Fischer), 1892, A., 333.
Diphenylaminefumaride (Piutti), 1886, A., 621.
Diphenylaminephthalein and its derivatives (Piutti), 1884, A., 451; 1885, A., 783.
"**Diphenyl-ψ-amphiphenacylnitrile**" and its nitroso- and nitro-derivatives (Möhlau), 1885, A., 560.
Diphenyl*iso*amylsemithiocarbazide (Philips), 1889, A., 1159.
Diphenylanthracene *di*bromide and **dihydride** (Linebarger), 1892, A., 720.
Diphenylarsine *tri*chloride (Michaelis and Schulte), 1883, A., 187.
Diphenylasparagine (Piutti), 1886, A., 621.
Diphenylazo-. See under Azo-.
Diphenylbenzenylamidine (Nölting and Weingärtner; Kühn), 1885, A., 979.
α-Diphenyl-β-benzoylpropionic acid (Japp and Klingemann), 1890, T., 681.
  action of heat on (Japp and Klingemann), 1890, T., 685.
  action of hydroxylamine on (Japp and Klingemann), 1890, T., 683.
  action of phenylhydrazine on (Japp and Klingemann), 1890, T., 682.
  reduction of (Japp and Klingemann), 1890, T., 681.
Diphenylbenzoylpropionic acid, ethylamide and methylamide of (Japp and Klingemann), 1890, T., 706, 703.
Diphenylbenzylacetic acid, and nitrile of (Neure), 1889, A., 597.
Diphenylbenzylidenemaleide and its derivatives (Gabriel and Cohn), 1892, A., 179; (Cohn), 1892, A., 483.
Diphenyl*iso*benzylidenemaleide (Cohn), 1892, A., 486.
Diphenylbenzylidenemaleimidine (Cohn), 1892, A., 484.
  nitro- (Cohn), 1892, A., 487.
Diphenyl*iso*benzylidenemaleimidine (Cohn), 1892, A., 486.
Diphenylbenzylidenemaleinethylimidine (Cohn), 1892, A., 484.
1:3-Diphenylbenzylidene-5-pyrazolone (Knorr and Klotz), 1887, A., 1121.

Diphenylbenzylmaleide and its derivatives (Cohn), 1892, A., 484.
Diphenylbenzyl-maleimidine and -maleinethylimidine (Cohn), 1892, A., 484, 485.
Diphenylbenzylphosphine chloride (Dörken), 1888, A., 832.
oxide and *di*chloride (Michaelis and La Coste), 1885, A., 1215.
oxide, *tri*nitro- (Dörken), 1888, A., 833.
Diphenylbenzylsemithiocarbazide (Philips), 1889, A., 1159.
Diphenylbenzylthiourea (Werner), 1892, P., 97.
Diphenylbismuthine bromide (Michaelis and Marquardt), 1889, A., 1061.
Diphenylbromobenzylidenemaleide (Cohn), 1892, A., 483.
Diphenylbromo*di*nitroresorcinol (Jackson and Warren), 1891, A., 1026.
Diphenylbromotoluquinoxaline (Hartmann), 1890, A., 976.
Diphenyl-butane and **-butylene** (Freund and Immerwahr), 1890, A., 1409, 1408.
Diphenylbutylenediamine (Colson), 1888, A., 139.
Diphenyl*iso*butylglyoxaline (Japp and Wynne), 1886, T., 467.
Diphenyl*iso*butylsemithiocarbazide (Philips), 1889, A., 1159.
Diphenylbutyric acid (Janssen), 1889, A., 596.
Diphenylbutyrolactone (Auger), 1888, A., 952.
Diphenylbutyronitrile (Janssen),1889, A., 596.
Diphenylcarbamic acid, thio-, derivatives of (Fraenkel), 1885, A., 1130.
Diphenylcarbamic chloride, thio- (Paschkowetzky), 1892, A., 164.
s-**Diphenylcarbamide** (*carbanilide*) (Hentschel), 1883, A., 1107.
action of sulphuric acid on (Hentschel), 1884, A., 1016.
s-**Diphenylcarbamide,** *m*-amido- (Leuckart), 1890, A., 760.
bromo- (Gattermann and Cantzler), 1892, A., 833.
m-nitro- (Leuckart), 1890, A., 760.
p-nitro- (Goldschmidt and Molinari), 1888, A., 1285; (Leuckart), 1890, A., 760.
m-*di*nitro- (Losanitsch), 1883, A., 583.
Diphenylcarbamide, *p*-bromo- (Goldschmidt and Molinari), 1888, A., 1284.
Diphenylcarbamide, *m*- and *p*-chloro- (Goldschmidt and Bardach), 1892, A., 979.
as-**Diphenylcarbamide,** thio- (Paschkowetzky), 1892, A., 164.
Diphenylcarbamidedicarboxylic acid (Traube), 1883, A., 194.
Diphenylcarbazide (Skinner and Ruhemann), 1888, T., 551; A., 274.
properties of (Fischer), 1889, A., 1164.
Diphenylcarbazone (Heller), 1891, A., 1212.
Diphenylcarbinol. See Benzhydrol.
p-**Diphenylcarboxyanilide** (Leuckart), 1890, A., 759.
o-**Diphenylcarboxylic acid,** condensation of (Graebe and Aubin), 1887, A., 589.
Diphenylcarboxylic acid, *di*bromo- [m.p. 212°] (Holm), 1883, A., 922.
Diphenylcarboxylic acids, *m*- and *p*- and salts of (Barth and Schreder) 1883, A., 468.
Diphenylcarboxylic acids, *di*bromo- [m.p. 204° and 232°] (Carnelley and Thomson), 1885, T., 589; P., 88.
Diphenyl*tri*chlorethane and its homologues (Elbs and Förster), 1889, A., 713.
Diphenyl*di*chlorodiketo-*p*-diazine (Abenius), 1890, A., 526.
Diphenylchloroformamide, compounds from (Lellmann and Benz), 1891, A., 1214.
Diphenylchloromethyldimethylcarbinol (Willgerodt and Genieser), 1888, A., 811.
αβ-**Diphenylcinchonic acid** (Pfitzinger), 1889, A., 413.
Diphenylcrotolactone (Klingemann), 1892, A., 1002.
Diphenylcyanamide (Werner), 1892, P., 96.
Diphenylcyanethylidene (Chautard), 1888, A., 810.
Diphenylcyanine chloride (Klason; v. Meyer), 1887, A., 363.
Diphenyl*tri*cyanocarboxylic acid (Krafft and Koenig), 1890, A., 1252.
Diphenylcyanotriazole (Bladin), 1889, A., 702.
Diphenyl-*o*-*iso*cyanuric acid (v. Hofmann), 1886, A., 234.
Diphenyldiaceto-*o*-tolylenediamine (Bistrzycki and Cybulski), 1891, A., 694.
Diphenyldiacetylene (Holleman), 1888, A., 261.

Diphenyldi*iso*amyltetrazone (Philips), 1889, A., 1159.

2:6-**Diphenyl-*m*-diazine,** 4-amido-, formation of (Schwarze), 1890, A., 1159.

s-**Diphenyldibenzylsuccinonitrile** (Chalaney and Knoevenagel), 1892, A., 619.

Diphenyldibutinyl ketone, *p*-*di*nitro- (Einhorn and Gehrenbeck), 1890, A., 162.

Diphenyldi*iso*butyltetrazone (Philips), 1889, A., 1159.

Diphenyldi*iso*butyrylglyoxime (Auwers and Meyer), 1888, A., 598.

Diphenyl-*o*:*p*-dicarboxylic acid (Reuland), 1890, A., 167.

Diphenyl-*m*-dicarboxylic acid, *di*chloro- (Stolle), 1888, A., 700.

Diphenyl-αγ-diethyl-βδ-diketopiperazines (Nastvogel), 1889, A., 1013; 1890, A., 1160.

Diphenyldiethylene (Rebuffat), 1885, A., 1137.
  and its derivatives (Rebuffat), 1891, A., 76.

Diphenyldiethyl-oxamide and -thiocarbamide (Neubert), 1886, A., 874, 873.

s-**Di-*p*-phenyldiethylthiocarbamide** (Mainzer), 1883, A., 1106.

p-**Diphenyldiguanide** (Emich), 1891, A., 1180.

Diphenyldihydrazimethylene (Curtius and Thun), 1891, A., 1357.

Diphenyldihydrazine (Arheidt), 1887, A., 958.

2:3-**Diphenyl-5:6-dihydropyrazine** (Mason), 1887, A., 493; 1889, T., 98.

αα′-**Diphenyldihydropyridine-γ-carboxylic acid** (Paal and Strasser), 1888, A., 62.

3′:4′-**Diphenyldihydroquinoxaline** (Fischer), 1891, A., 747.

Diphenyldihydroxylamine (Fischer and Hepp), 1887, A., 1115.

Diphenyldi*iso*indole, and its salts (Möhlau), 1883, A., 342.
  identity of, with 3′-phenylindole (Möhlau), 1888, A., 483.
  azo-colouring substances from (Möhlau), 1883, A., 342.

Diphenyldi*iso*indoleazo-. See under Azo-.

Diphenyldi*iso*indolesulphanilic acid (Möhlau), 1883, A., 343.

Diphenyldiketodihydropyrazine (Abenius), 1890, A., 268.

Diphenyldiketopiperazine and its derivatives (Bischoff), 1888, A., 726; (Abenius), 1888, A., 854.

Diphenyl-αβ-diketopiperazine (Bischoff and Nastvogel), 1889, A., 1015; 1890, A., 1161.

Diphenyl-αγ-diketopiperazine (Hausdörfer), 1889, A., 1013; (Bischoff and Hausdörfer), 1890, A., 1332.
  homologues of (Nastvogel), 1889, A., 1012.

Diphenyl-αδ-diketopiperazine (Hausdörfer), 1889, A., 1014; (Bischoff and Hausdörfer), 1890, A., 1333.

Diphenyl-αγ-diketopiperazine-βδ-homocarboxylic acid (Bischoff and Nastvogel), 1890, A., 1162.

Diphenyldiketopyrazine (Abenius), 1890, A., 526.

Diphenyldimethyl (Adam), 1888, A., 959.

Diphenyldimethylaldine (Schmidt), 1890, A., 373.

Diphenyldimethyl*di*amidomethylene-*o*-phenylenediamine (Moore), 1890, A., 246.

Diphenyldimethylazimethylene (Curtius and Rauterberg), 1891, A., 1359.

Diphenyl-αγ-dimethyl-βδ-diketopiperazine (Nastvogel), 1889, A., 1012.

Diphenyl-αγ-dimethyl-βδ-diketopiperazines, isomerism of (Nastvogel), 1890, A., 1160.

Diphenyldimethylenediamine (Pratesi), 1885, A., 782.

Diphenyldimethylindole (Arheidt), 1887, A., 958.

Diphenyldimethylmalonamide (Freund), 1884, A., 729.

Diphenyldimethylphosphonium iodide (Dörken), 1888, A., 833.

Diphenyldimethylpyrazoloneacetic acid (Pellizzari), 1890, A., 645.

s-**Diphenyldimethylsuccinonitrile** (Chalaney and Knoevenagel), 1892, A., 619.

2:3-**Diphenyl-1:4-dimethyltetrahydropyrazine** (Mason), 1889, T., 104.

Diphenyldimethylthiocarbazide (Stahel), 1890, A., 1260.

Diphenyldinitrosacyl (Holleman), 1889, A., 50.

Diphenyldiphenylenedicarbamide (Kühn), 1885, A., 979.

3-**Diphenyl-4:5-diphenyl-1-methylpyrrolone** (Klingemann), 1891, A., 736.

Diphenyldipropylguanidine (Francksen), 1884, A., 1008.

Diphenyldi*iso*propyltetrazone (Philips), 1889, A., 1159.

Diphenyldipyridazine (Ciamician and Zanetti), 1891, A., 1502.

Diphenyldisulphine, *m*-*di*nitro- (Ekbom), 1891, A., 567.

Diphenyldisulphonic acid and its derivatives (Limpricht), 1891, A., 930.

  amido- (Limpricht), 1891, A., 930.

  bromamido- (Limpricht), 1891, A., 929.

*iso***Diphenylene,** new reaction of (Julius), 1884, A., 1181.

Diphenylene ketone (Carnelley and Dunn), 1888, P., 53; A., 1095.

  bromo- (Claus and Erler), 1887, A., 269.

  *di*bromo- (Hodgkinson and Matthews), 1883, T., 165; (Holm), 1883, A., 921; (Claus and Erler), 1887, A., 269.

Diphenylene ketone oxide. See Xanthone.

Diphenylene ketoxime (Spiegler), 1884, A., 1182; (Wegerhoff), 1889, A., 1067.

Diphenyleneazone (Täuber), 1892, A., 184, 482.

  mono- and *di*-oxides of (Täuber), 1892, A., 183.

  *di*amido- (Täuber), 1892, A., 184.

Diphenylenebisazo-dimethylaniline, -β-naphthol and -resorcinol (Reuland), 1890, A., 167.

Diphenylenediacetonehydrazine (Arheidt), 1887, A., 958.

p-**Diphenylenediamine** (Täuber), 1892, A., 481.

Diphenylenediethylidene, synthesis of, from benzene and ethylidenic chloride (Angelbis and Anschütz), 1884, A., 753.

Diphenylenedihydrazinepyruvic acid (Arheidt), 1887, A., 958.

Diphenylenedimethylic *di*sulphide (Obermeyer), 1888, A., 125.

Diphenylenedisemicarbazide (Arheidt), 1887, A., 958.

Diphenylenediurethane (Snape), 1886, T., 256; P., 158.

Diphenylenehydrazone (Täuber), 1892, A., 184.

Diphenylenehydroxydihydroanthraquinone (Liebermann and Bergami), 1890, A., 515.

Diphenyleneketonecarboxylamide (Wegerhoff), 1888, A., 1201.

Diphenyleneketonecarboxylic acid (Bamberger and Hooker), 1885, A., 906, 1070; (Graebe and Aubin), 1887, A., 589.

o-**Diphenyleneketonecarboxylic acid** (Graebe and Aubin), 1889, A., 145.

Diphenyleneketonedicarboxylic acid (Bamberger and Hooker), 1885, A., 906.

Diphenyleneketoximedicarboxylic acid (Bamberger and Hooker), 1885, A., 906.

Diphenylenemethane sulphide and **sulphone** (Graebe and Schultess), 1891, A., 1059.

Diphenylenenaphthaquinoxalinesulphonic acid, sodium salt of (Witt), 1886, A., 889.

Diphenylene-*m*-phenylenediamine, amido- (Fischer and Hepp), 1890, A., 614.

p-**Diphenylene-α-tetramethyldipyrrole** (Paal and Schneider), 1887, A., 273.

Diphenylenetoluquinoxaline (Hinsberg), 1884, A., 1053.

Diphenylenic *diiso*cyanate (Snape), 1886, T., 255.

  oxide (Galewsky), 1891, A., 1234.

    synthesis of (Täuber and Halberstadt), 1892, A., 1470.

    *di*amido- (Galewsky), 1891, A., 1234.

s-**Diphenylethane** (*dibenzyl*) (Anschütz), 1883, A., 807.

  formation of, from benzylic bromide (Gladstone and Tribe), 1885, T., 453.

  formation of, from ethylenic *di*chloride and benzene in presence of aluminium chloride (Greene), 1885, A., 58.

  molecular refraction and dispersion of, in solution (Gladstone), 1891, T., 591.

  derivatives of (Heumann and Wiernik), 1887, A., 673.

Diphenylethane, *di*-*o*-chloro*di*nitrosyl- (Behrend and Nissen), 1892, A., 1200.

  p-*di*nitro-, preparation of (Roser), 1887, A., 836.

  o-*di*nitrocyano- (Bamberger), 1887, A., 131.

  di-*p*-nitro*di*nitrosyl- (Behrend and König), 1891, A., 1032.

as-**Diphenylethane,** synthesis of, from benzene and ethylidenic chloride (Angelbis and Anschütz), 1884, A., 753; (da Silva), 1884, A., 1356.

  action of nitric acid on (Anschütz and Romig), 1886, A., 1033.

  nitration-products of (Anschütz and Romig), 1885, A., 800.

  mono- and *di*-nitro- (Anschütz and Romig), 1885, A., 768.

s-**Diphenylethane-*o*-carboxylic acid** (Gabriel), 1885, A., 1230.

s-**Diphenylethane-*o*-dicarboxylic acid** (Wislicenus), 1885, A., 58; (Dobreeff), 1887, A., 958; (Ephraim), 1890, A., 1143.
Diphenylethenylsulphone phenylic sulphide (Laves), 1890, A., 988.
Diphenylethenylureide (Pinner), 1891, A., 60.
2′:4′-**Diphenyletho-αβ-dihydronaphthaquinoxaline** (Fischer and Busch), 1891, A., 1514.
1′:3′-**Diphenylethonaphthazonium** bromide, hydroxide and nitrate (Fischer and Busch), 1891, A., 1110.
Diphenylethyl *o*-xylyl ketone (Wege), 1892, A., 338.
β-**Diphenylethylamine** (Freund and Immerwahr), 1890, A., 1407.
s-**Diphenylethylamine** (Leuckart and Janssen), 1889, A., 883.
Diphenylethylamine, action of diazo-*p*-nitrobenzene on (Meldola), 1884, T., 111.
Diphenylethylcarbamide (Gebhardt), 1884, A., 1321.
s-**Diphenylethylene.** See Stilbene.
Diphenylethylene diketone (*diphenacyl; succinophenone*) (Claus and Werner), 1887, A., 827; (Auger), 1888, A., 952; (Kapf and Paal), 1889, A., 147.
Diphenylethyleneallylidenediamine (Mason), 1887, A., 493.
Diphenylethylenediamine, action of carbonyl chloride on (Hanssen), 1887, A., 577
  action of succinic acid and anhydride on (Bischoff and Nastvogel), 1890, A., 1164.
α-**Diphenylethylenedihydrazine** (Burchard and Michaelis), 1889, A., 138; (Burchard), 1890, A., 250.
Diphenylethylenedihydrazine, *di*-thionyl- (Michaelis and Ruhl), 1892, A., 1324.
Diphenylethylenedihydrazinedisuccinic acid (Burchard), 1890, A., 250.
Diphenylethylenepropylidenedihydrazine (Burchard), 1890, A., 251.
Diphenylethylenesulphone (Otto and Damköhler), 1885, A., 261.
  action of potash and of ammonia on (Otto and Damköhler), 1885, A., 537.
Diphenylethylene*di*thiocarbamide (Lellmann and Würthner), 1885, A., 978.
Diphenylethylenic glycol *mono*nitrite (Anschütz and Romig), 1886, A., 1034.
Diphenylethylic cyanide (Meyer), 1888, A., 693.
Diphenylethylic *tri*cyanide (Krafft and v. Hansen), 1889, A., 697.
  hydrogen phosphate (Lossen and Köhler), 1891, A., 1015.
Diphenylethylidene ether (Biginelli), 1891, A., 296.
Diphenylethylidenediamine, cyano- (Chautard), 1888, A., 810.
Diphenylethylidenedisulphone (Escales and Baumann), 1887, A., 123.
Diphenylethylidenehydrazine (v. Miller and Plöchl), 1892, A., 1196.
Diphenylethylsemithiocarbazide (Philips), 1889, A., 1158.
Diphenylethylthiocarbamide (Gebhardt), 1884, A., 1321.
  action of aniline on (Gebhardt), 1885, A., 383.
Diphenylethyltriazole (Bladin), 1890, A., 271.
Diphenylethylurazine (Pinner), 1888, A., 1084.
Diphenylformamidine (Wallach), 1883, A., 49; (Pinner), 1883, A., 731.
  m-nitro- (Comstock and Wheeler), 1892, A., 707.
  m-*di*nitro- (Comstock and Wheeler), 1892, A., 706.
Diphenylfumaramic acid (Piutti), 1886, A., 792.
Diphenylfurazan (Dodge), 1891, A., 1237.
2:5-**Diphenylfurfuran** (Kapf and Paal), 1888, A., 839; 1889, A., 148; (Perkin and Schloesser), 1889, P., 162; 1890, T., 944, 953.
  reduction of (Perkin and Schloesser), 1890, T., 955.
  *tetra*bromo- (Perkin and Schloesser), 1890, T., 954.
2:5-**Diphenylfurfuran-3-carboxylic acid** (Kapf and Paal), 1888, A., 839; (Perkin and Schloesser), 1890, T., 951.
  action of bromine on (Perkin and Schloesser), 1890, T., 953.
2:5-**Diphenylfurfuran-3:4-dicarboxylic acid** (Perkin and Calman), 1886, T., 168; (Perkin and Schloesser), 1890, T., 951.
  preparation of (Perkin), 1885, T., 271.
s-**Diphenylglutaric acid** (Zelinsky), 1890, A., 132; (Zelinsky and Feldmann), 1890, A., 384.
s-**Diphenylglyceryl ether** (Rössing), 1886, A., 345.
Diphenylglycollic acid. See Benzilic acid.
Diphenylglyoxaline (Japp), 1887, T., 557; P., 34.

α-**Diphenylglyoxime** (Goldschmidt and Meyer), 1883, A., 1120.
β-**Diphenylglyoxime** (Goldschmidt), 1884, A., 62.
Diphenylglyoxime peroxide (Scholl), 1891, A., 316.
Diphenylguanidine (Schöne), 1886, A., 338.
  *di*cyanide, bromo- and nitro- (Hirsch), 1888, A., 947.
Diphenylhexylmethane and its derivatives (Krafft), 1887, A., 253.
Diphenylhomofluorindine (Fischer and Hepp), 1890, A., 1444.
Diphenylhydantoin (Bischoff and Hausdörfer), 1892, A., 1334.
as-**Diphenylhydrazine**, derivatives of (Stahel), 1890, A., 1259.
  cyanuric chloride (Fries), 1886, T., 742.
s-**Diphenylhydrazine** (*hydrazobenzene*), action of benzaldehyde on (Cleve), 1886, A., 545.
  action of dibasic organic acids on (v. Bandrowski), 1884, A., 1015.
  action of ethyldichloramine on (Pierson and Heumann), 1883, A., 915.
  action of ethylic acetoacetate on (v. Perger), 1886, A., 898; (Müller), 1886, A., 899.
  intramolecular change in (Jacobson and Fischer), 1892, A., 840.
  derivatives of (Stern; v. Bandrowski), 1884, A., 1015.
  halogen derivatives of (Janovsky and Erb), 1887, A., 478.
s-**Diphenylhydrazine**, *di*amido- (*hydrazoaniline*), preparation of (Graeff), 1885, A., 1127.
  bromo- [m.p. 63°] (Janovsky and Erb), 1886, A., 1024.
  p-bromo- [m.p. 115°] (Janovsky and Erb), 1887, A., 479.
  *di*bromo- (Janovsky and Erb), 1887, A., 479.
  p-chloro- (Heumann and Mentha), 1886, A., 875.
  m-chloro-*o*-nitro- (Willgerodt and Ferko), 1888, A., 830.
  p-iodo- (Nölting and Werner), 1891, A., 211.
  α-*di*nitro- (Willgerodt and Ferko), 1888, A., 829; (Willgerodt and Hermann), 1889, A., 1160; 1890, A., 1259.
  *tri*nitro- (Fischer), 1890, A., 40.
    conversion of, into nitrosodinitrazobenzene (Freund), 1889, A., 977.
Diphenylhydrazineacetonylacetone (Paal), 1885, A., 505.
s-**Diphenylhydrazine**-*o*-**carboxylic acid** (Paal), 1892, A., 67.
  p-bromo-, and *p*-chloro- (Paal), 1892, A., 68.
s-**Diphenylhydrazinedi**-*m*-**carboxylic acid** (*m-hydrazobenzoic acid*), acids obtained by heating, with stannous chloride (Kusserow), 1890, A., 778.
s-**Diphenylhydrazinedi**-*o*-**carboxylic acid** (*o-hydrazobenzoic acid*) (Homolka), 1884, A., 1342.
s-**Diphenylhydrazinedisulphonamide** (Limpricht and Meyer), 1892, A., 973.
s-**Diphenylhydrazinedisulphonic acid** (Rodatz), 1883, A., 479; (Limpricht), 1889, A., 399; 1890, A., 987.
s-**Diphenylhydrazinedisulphonic acid** action of nitrous acid on (Limpricht), 1885, A., 1216.
Diphenylhydrazinepyruvic acid, synthesis of (Fischer and Hess), 1884, A., 1181.
s-**Diphenylhydrazine***di***thiodisulphonic acid** and its barium salt (Bauer), 1885, A., 1139.
s-**Diphenylhydrazinethiodisulphonic acids** (Limpricht), 1885, A., 985.
p-**Diphenylhydrazohexamethylene** (v. Baeyer and Noyes), 1889, A., 1148.
Diphenylhydrazonebenzylidenesulphonic acid, sodium salt of (Kafka), 1891, A., 720.
Diphenylhydrazonenitro-opianic acid (Bistrzycki), 1888, A., 1209.
Diphenylhydrazoneopianic acid (Bistrzycki), 1888, A., 1209; (Tust), 1892, A., 1210.
Diphenylhydrazonephthalaldehydic acid (Allendorff), 1891, A., 1370.
Diphenylic carbonate, action of aniline, *o*- and *p*-toluidines, naphthylamine, and of diphenylcarbamide on (Eckenroth), 1885, A., 786.
    conversion of, into salicylic acid (Hentschel), 1883, A., 589.
  *dodeca*chloride (Schüpphaus), 1885, A., 52.
  *di*cyanide (Pinner), 1891, A., 60.
  o:*p*-*di*cyanide (Reuland), 1890, A., 167.
  $\Delta^{1:3}$-dihydroterephthalate (v. Baeyer and Herb), 1890, A., 1132.
  $\Delta^{2:5\text{-cistrans}}$ dihydroterephthalate (v. Baeyer and Herb), 1890, A., 1131.
  diphenylenedicarbamate (Snape), 1886, T., 256.
  hydrogen cyanide (Krafft and Koenig), 1890, A., 1252.

Diphenylic lead oxide (Polis), 1888, A., 283.
  lead salts (Polis), 1887, A., 573; 1888, A., 283.
  sebacamide (Gehring), 1887, A., 822.
  *di*sulphide (Cleve), 1888, A., 698.
Diphenylimide, imidothio-, and its salts (Bernthsen), 1885, A., 259.
Diphenylimidomethylthiazoline (Traumann), 1889, A., 415.
"**Diphenyl*di*imidonaphthol**" (*β-naphthaquinonedianilide*) (Meldola), 1884, T., 157.
Diphenylimidophenylene (Seifert), 1890, A., 490.
Diphenylimidothiazoline (Fischer and Busch), 1891, A., 1517.
Diphenylindole (Fischer), 1886, A., 806; (Pfülf), 1887, A., 956.
Diphenyline. See *iso*Benzidine.
Diphenylizindihydroxytartaric acid (Ziegler and Locher), 1887, A., 578.
  m-nitro- (Bischler and Brodsky), 1890, A., 151.
Diphenylketazine (Curtius and Rauterberg), 1891, A., 1359.
Diphenylketopiperazine (Bischoff and Nastvogel), 1889, A., 1009; 1890, A., 1160.
***β*-Diphenyllactic acid** and **anhydride** (Weise), 1889, A., 253.
Diphenylmaleanil (Anschütz and Bendix), 1891, A., 71.
Diphenylmaleic acid, action of soda on (Delisle), 1892, A., 297.
Diphenylmaleic anhydride (Anschütz and Bendix), 1891, A., 71; (Gabriel and Cohn), 1892, A., 178.
Diphenylmaleonitrile (Chalaney and Knoevenagel), 1892, A., 618.
Diphenylmethane (Hodgkinson and Matthews), 1883, T., 164.
  oxidation of, in the organism (Klingenberg), 1891, A., 1529.
  derivatives of (Staedel and Haase), 1890, A., 1422.
Diphenylmethane, *m*-amido- (Becker), 1883, A., 203.
  p-amido- (Basler), 1884, A., 310.
    derivatives of (Manns), 1889, A., 261.
  *p-di*amido-, and its nitro-derivatives (Gram), 1892, A., 618.
  *tetr*amido-, and its compounds (Staedel), 1883, A., 991.
  bromo-, preparation of (Henderson), 1891, T., 731.
  m-nitro- (Becker), 1883, A., 202.
  o-nitro-, preparation of (Geigy and Koenigs), 1885, A., 1237.
Diphenylmethane, *p*-nitro- (Basler), 1884, A., 310; (Manns), 1889, A., 261.
  *di*nitro- (Basler), 1884, A., 310.
  *tetra*nitro- (v. Richter), 1888, A., 1190.
    preparation of (Staedel), 1883, A., 990.
p-**Diphenylmethanecarbamide** (Manns), 1889, A., 261.
Diphenylmethanedicarboxylic acid (Graebe and Juillard), 1888, A., 156; (Juillard), 1888, A., 708.
Diphenylmethanehydrazine (Manns), 1889, A., 261.
Diphenylmethanetricarboxylic acid (Graebe and Juillard), 1888, A., 154; (Juillard), 1888, A., 707.
Diphenylmethenylamidine (Senier), 1885, A., 767.
Diphenylmethenylazidine (Pinner), 1884, A., 1323.
Diphenylmethenyldiamine (Tobias), 1883, A., 326.
Diphenylmethylamine, molecular refraction and dispersion of (Gladstone), 1891, T., 296.
Diphenylmethylamine, *di*amidothio-, and its derivatives (Bernthsen), 1885, A., 259.
  p-nitroso- (Fischer and Hepp), 1890, A., 614.
  thio- (Holzmann), 1888, A., 1080.
Diphenylmethylamineazyline (Lippmann and Fleissner), 1884, A., 180.
Diphenylmethylaminesulphone (Bernthsen), 1884, A., 596.
Diphenylmethylcarbamide (Gebhardt), 1884, A., 1321.
Diphenylmethylcarbinol (Adam), 1888, A., 959.
  nitro- (Anschütz and Romig), 1885, A., 768.
Diphenyl-*o*-, -*m*- and -*p*-methylcarbinylamines (Goldschmidt and Stöcker), 1891, A., 1480, 1479.
Diphenyl-*m*-methylcarbinylcarbamide (*homobenzhydrylcarbamide*) (Goldschmidt and Stöcker), 1891, A., 1480.
Diphenyl-*p*-methylcarbinyl-phenylcarbamide and **-thiocarbamide** (Goldschmidt and Stöcker), 1891, A., 1480.
Diphenylmethylcinnamaldazimethylene (Curtius and Rauterberg), 1891, A., 1360.
2:6-**Diphenyl**-5-**methyl**-*m*-**diazine,** 4-amido- (v. Meyer), 1889, A., 578; (Schwarze), 1890, A., 1159.
Diphenylmethyldihydropyrazine (Knorr and Blank), 1885, A., 556.

4′:5′-Diphenyl-3′-methyldihydroquinoxaline (Fischer and Busch), 1891, A., 1515.
Diphenylmethylene diketone. See Dibenzoylmethane.
Diphenylmethyleneaniline (v. Miller and Plöchl), 1892, A., 1195.
Diphenylmethylene-benzaldazine and **-cinnamaldazine** (Curtius and Rauterberg), 1891, A., 1359.
Diphenylmethylene-hydrazine and **-tetrazone** (Curtius and Rauterberg), 1891, A., 1358, 1359.
Diphenylmethylene*di*thioglycollic acid (Bongartz), 1888, A., 479.
Diphenylmethyleneethylene *di*sulphide (Fasbender), 1888, A., 805.
Diphenylmethylethophenazonium hydroxide (Kehrmann and Messinger), 1892, A., 1108.
Diphenylmethylglyoxaline (Japp and Wynne), 1886, T., 465; P., 201; (Japp), 1887, T., 557; P., 34.
Diphenylmethylic *tri*cyanide (Krafft and v. Hansen), 1889, A., 696.
    formation of (Eitner and Krafft), 1892, A., 1184.
    preparation of (Krafft and Koenig), 1890, A., 1252.
  sulphide (Obermeyer), 1888, A., 124.
Diphenylmethylphthalide (v. Hemilian), 1884, A., 321.
Diphenylmethylpyrazole and its derivatives (Knorr and Blank), 1885, A., 556; (Fischer and Bülow), 1885, A., 1237.
  o- and *p*-nitro- (Knorr and Jödicke), 1885, A., 1247, 1248.
1:3-Diphenyl-5-methylpyrazole, *tri*nitro- (Knorr and Laubmann), 1889, A., 409.
1:5-Diphenyl-3-methylpyrazole (Knorr), 1887, A., 678.
Diphenylmethyl*iso*pyrazole and its salts (Knorr and Blank), 1885, A., 810.
Diphenylmethylpyrazolecarboxylic acid (Knorr and Blank), 1885, A., 556.
  p-amido- (Knorr and Jödicke), 1885, A., 1248.
  o- and *p*-nitro- (Knorr and Jödicke), 1885, A., 1247, 1248.
Diphenylmethyl*iso*pyrazolecarboxylic acid and its salts (Knorr and Blank), 1885, A., 810.
Diphenylmethylpyrazolecarboxylic anhydride, *o*-amido- (Knorr and Jödicke), 1885, A., 1248.
1:5-Diphenyl-3-methylpyrazoline (Knorr), 1887, A., 678.
1:3-Diphenyl-2-methylpyrazolone (Knorr and Klotz), 1887, A., 1121.
1:5-Diphenyl-2-methylpyrrole (Lederer and Paal), 1886, A., 75.
1:5-Diphenyl-2-methylpyrrole-3-carboxylic acid and its ethyl salt (Lederer and Paal), 1886, A., 75.
3′:4′-Diphenylmethylquinoxaline (Hinsberg), 1884, A., 1053.
Diphenylmethylsulphonephenylic sulphide (Laves), 1890, A., 988.
αβ-Diphenyl-μ-methylthiazole (Hubacher), 1891, A., 222.
Diphenylmethylthiocarbamide (Gebhardt), 1884, A., 1320.
  action of ammonia and of *o*-toluidine on (Gebhardt), 1885, A., 383.
Diphenylmethyltriazole (Bladin), 1889, A., 138.
Diphenylnaphthaleneazammonium hydroxide and its salts (Zincke and Lawson), 1887, A., 731.
Diphenylnaphthaquinoxaline (Lawson), 1885, A., 1239.
Diphenyl-αβ-naphthatriazine (Meldola), 1890, T., 331.
  and its derivatives (Meldola and Forster), 1891, T., 681.
Diphenylnaphthylenecarbamide (Bamberger and Schieffelin), 1889, A., 892.
Diphenylnaphthylenediamine [m.p. 168°] (Annaheim), 1887, A., 839.
Diphenylnaphthylene-*p*-diamine (Fischer and Hepp), 1890, A., 911.
Diphenyl-*o*-nitrobenzylcarbamide (Paal and Bodewig), 1891, A., 944.
Diphenyl*di*nitroethane (Gabriel), 1885, A., 1229.
Diphenyl*di*nitromethane (Scholl), 1891, A., 315.
Diphenyl-*m*- and -*p*-nitrophenylcarbamides (Lellmann and Bonhöffer), 1887, A., 936.
Diphenylnitrosamine, *o*-nitro- (Fischer), 1892, A., 332.
Diphenyl*di*nitrosohydrazine (Arheidt), 1887, A., 958.
Diphenylnitrosoketopiperazine (Bischoff and Nastvogel), 1890, A., 1161.
Diphenyl*tri*nitrosopropane (de Neufville and v. Pechmann), 1891, A., 319.
Diphenyl-*m*-nitro-*p*-tolylcarbamide (Lellmann and Bonhöffer), 1887, A., 936.
Diphenyloxalylguanidine, nitro- (Hirsch), 1888, A., 947.
Diphenyloxamide. See Oxanilide.

Diphenyloxycyanidine (Pinner), 1891, A., 59.
Diphenylparabanic acid (v. Stojentin), 1885, A., 1195, 1196.
  nitro- (Hirsch), 1888, A., 947.
  *di*nitro- (v. Stojentin), 1885, A., 1195.
Diphenyl-*p*-phenylene diketone (Nölting and Kohn), 1885, A., 389; 1886, A., 349.
Diphenyl-*m*- and -*p*-phenylenediamines and their derivatives (Calm), 1884, A., 591, 592.
Diphenyl-*m*-phenylenediamine, *p*-nitroso- (Fischer and Hepp), 1890, A., 613.
Diphenylphenylenedicarbamide (Kühn), 1885, A., 979.
m-**Diphenylphenylenedisulphone,** action of potash on (Otto and Rössing), 1887, A., 372.
Diphenylphenylenepropionic acid (Liebermann and Hartmann), 1892, A., 1228.
Diphenylphenylene*di*thiocarbamides, *o*- and *m*- (Lellmann and Würthner), 1885, A., 977.
Diphenylphosphinic acid, *di*amido- (Dörken), 1888, A., 834.
  *di*nitro- (Dörken), 1888, A., 833.
Diphenylphosphonium salts (Dörken), 1888, A., 833.
Diphenylphosphoric acid, *di*nitro- (Rapp), 1884, A., 1337.
Diphenylphosphorous acid (Noack), 1883, A., 737.
Diphenylphosphoryl chloride (Noack), 1883, A., 735; (Anschütz and Emery), 1890, A., 34.
  *tri*chloride and thiochloride (Anschütz and Emery), 1890, A., 35.
Diphenylphthalamic acid, and its salts (Piutti), 1884, A., 451.
Diphenylphthalidecarboxylic acid (v. (Hemilian), 1887, A., 267.
Diphenylphthaloylic acid (Kaiser), 1890, A., 897.
Diphenylphthalylasparagine (Piutti), 1886, A., 621.
Diphenylpiperazine (Bischoff and Trapesonzjanz), 1890, A., 1332.
  preparation of (Lellmann and Schleich), 1889, A., 904.
  and its homologues, preparation of (Bischoff), 1889, A., 1010.
Diphenylpiperazine, *p*-*di*amido-, formation of colouring matters from (Lellmann and Schleich), 1889, A., 904.
  p-*di*nitro- (Schmidt and Wichmann), 1892, A., 210.
2:3-**Diphenylpiperazines,** α- and β-, and their derivatives (Mason), 1889, T., 102, 105.
αα-**Diphenylpiperidine** and αα-**diphenylpiperidine-γ-carboxylic acid** (Paal and Strasser), 1888, A., 63.
αβ-**Diphenylpropane** (Wispek and Zuber), 1883, A., 977; (Kraemer, Spilker and Eberhardt), 1891, A., 207.
Diphenylpropionic acid and its derivatives (Böttinger), 1884, A., 55.
β-**Diphenylpropionic acid,** preparation of (Henderson), 1891, T., 734; P., 123; (Liebermann and Hartmann), 1892, A., 849, 1228.
Diphenylpropylamine (Freund and Remse), 1890, A., 1422.
Diphenylpropyl-carbamide, -oxamide and **-phenylthiocarbamide** (Freund and Remse), 1890, A., 1422.
Diphenylpropylic alcohol (Freund and Remse), 1890, A., 1423; (Perkin and Stenhouse), 1891, T., 1009.
Diphenylpropylpropionitrile (Rossolymo), 1889, A., 862.
Diphenyl*iso*propylsemithiocarbazide (Philips), 1889, A., 1159.
2:3-**Diphenylpyrazine** (Mason), 1889, T., 99.
  *di*nitro- (Mason), 1889, T., 101.
3:6-**Diphenylpyrazine** (*isoindole, amphiphenacylnitrile*) (Friedländer and Mähly), 1883, A., 918; (Möhlau), 1885, A., 560.
  molecular weight of (Treadwell and Meyer), 1883, A., 665.
1:3-**Diphenylpyrazole** (Knorr and Laubmann), 1889, A., 410.
Diphenylpyrazolecarboxylic acid (Beyer and Claisen), 1887, A., 944.
Diphenylpyrazoledicarboxylic acid (Knorr and Laubmann), 1889, A., 409.
1:5-**Diphenylpyrazoline** (Laubmann), 1888, A., 726.
1:3-**Diphenylpyrazolone** and its derivatives (Knorr and Klotz), 1887, A., 1121.
Diphenylpyrazoloneazobenzene (Knorr and Klotz), 1887, A., 1121.
2:6-**Diphenylpyridine** (Paal and Strasser), 1888, A., 63; (Doebner and Kuntze), 1889, A., 1212.
2:6-**Diphenylpyridine-4-carboxylic acid** (Paal and Strasser), 1888, A., 62.
αα′-**Diphenylpyridinetricarboxylic acid** (Doebner and Kuntze), 1889, A., 412.
2:6-**Diphenylpyridone** and 2:6-**diphenylpyridone-3-carboxylic acid** (Feist), 1891, A., 458.

2:6-**Diphenylpyrone** and 2:6-**diphenylpyronecarboxylic acid** (Feist), 1891, A., 458.

2:5-**Diphenylpyrrole** (Baumann), 1887, A., 736; (Kapf and Paal), 1889, A., 149.

2:5-**Diphenylpyrrole-3-carboxylic acid** (Kapf and Paal), 1888, A., 840; 1889, A., 149.

Diphenyl-pyrrolidone and **-pyrrolone** (Klingemann), 1892, A., 1003.

Diphenylpyrroylcrotolactone (Angeli), 1890, A., 1000.

α-**Diphenyl-β-pyrroylpropionic acid** (Angeli), 1890, A., 1000.

p-**Diphenylquinol** (Müller and v. Pechmann), 1889, A., 1171.

Diphenylquinol, *di-*, *tri-* and *tetra-*nitro- (Nietzki and Schündelen), 1892, A., 310.

2:4-**Diphenylquinoline** (Beyer), 1887, A., 849.

αβ-**Diphenylquinoline** (Buddeberg), 1890, A., 1142.

Diphenylquinolylmethane and its derivatives (Fischer and Fränkel), 1886, A., 561; 1888, A., 56.

p-**Diphenylquinone** (Müller and v. Pechmann), 1889, A., 1171.

Diphenylquinoxaline, *di*amido- (Nietzki and Müller), 1889, A., 605.

Diphenylquinoxaline-*m*-carboxylic acid (Zehra), 1891, A., 303.

Diphenylresorcinol, *tetra-*, *penta-* and *hexa-*nitro- (Nietzki and Schündelen), 1892, A., 310.

Diphenylrosamine (Heumann and Rey), 1890, A., 158.

αμ-**Diphenylselenazole** (Hofmann), 1889, A., 727.

Diphenylselenocarbamide (Stolte), 1887, A., 43.

Diphenylselenone (Chabrié), 1890, A., 34.

Diphenylsemicarbazide (Kühn), 1885, A., 261.

Diphenylsemithiocarbazide, *p*-bromo-*o*-nitro-, and *m*-nitro- (Bischler and Brodsky), 1890, A., 152, 151.

Diphenylsemithiocarbazidecarboxylic acid (Roder), 1887, A., 150.

Diphenylsilicon *di***chloride** (Polis), 1886, A., 619.

Diphenyl-stibic acid and **-stibine chloride** (Michaelis and Reese), 1886, A., 885.

Diphenylsuccinamic acid, and its salts (Piutti), 1885, A., 783.

Diphenyl-succinanil and **-succinanilic acid** (Anschütz and Bendix), 1891, A., 72.

Diphenylsuccinic acid, action of strong sulphuric acid on (Roser), 1888, A., 1301.
  cyano- (Poppe), 1890, A., 504.

Diphenyl*iso*succinic acid, preparation of (Henderson), 1891, T., 732; P., 123.

Diphenylsuccinic acid (Anschütz and Bendix), 1891, A., 71.

Diphenylsuccinic anhydrides (Tillmanns), 1890, A., 1135; (Anschütz and Bendix), 1891, A., 72.

Diphenylsuccinimidine (Blochmann), 1887, A., 931.

Diphenylsuccinonitriles, stereoisomeric (Chalaney and Knoevenagel), 1892, A., 619.

Diphenylsulphamic acid, amido- (Spiegel), 1885, A., 987.

Diphenylsulphide-*o*-carboxylic acid (Ziegler), 1890, A., 1292; (Graebe and Schultess), 1891, A., 1058.

Diphenylsulphonamic acid, ammonium salt of (Traube), 1891, A., 569.

Diphenylsulphone (*benzenesulphone; sulphobenzide*) (Otto), 1885, A., 535.
  decomposition of (Otto), 1886, A., 1031.

Diphenylsulphone, *di*amido- and its derivatives (Lauth), 1892, A., 1093.
  o-*di*chloro- (Friedel and Crafts), 1887, A., 1101.

Diphenylsulphone mercaptan (R. and W. Otto), 1888, A., 282.

s-**Diphenylsulphoneacetone,** synthesis of (Otto), 1889, A., 1186.

Diphenylsulphonebromopropane (Stuffer), 1890, A., 988.

Diphenylsulphone-*o*-carboxylic acid (Graebe and Schultess), 1891, A., 1058.

Diphenylsulphonedimethylacetone (Otto), 1886, A., 801.

Diphenylsulphonedisulphonic acid and its derivatives (Otto and Rössing), 1887, A., 263.

Diphenylsulphonemethane (Fromm), 1890, A., 56.

Diphenylsulphonephenyl ether (Otto and Rössing), 1887, A., 372.

s-**Diphenylsulphone*iso*propylic alcohol** (Otto and Rössing), 1890, A., 780.

Diphenylsulphone-*m*-sulphonic acid (Otto), 1886, A., 1031.

αβ-**Diphenylsulphone-β-thiophenylpropane** (Autenrieth), 1891, A., 1068.

Diphenylsulphonethylamine (Otto), 1890, A., 380.

Diphenylsulphonethylic oxide (Otto and Damköhler), 1885, A., 263.
  sulphide (Otto and Damköhler), 1885, A., 538.
Diphenylsulphonethylmethylamine (Otto and Damköhler), 1885, A., 538.
Diphenylsulphonic acid, *p*-amido- (Carnelley and Schleselmann), 1886, T., 380; P., 184.
Diphenylsulphoxide (Colby and Mc Loughlin), 1887, A., 371.
  *di*nitro- (Colby and McLoughlin), 1887, A., 372.
Diphenyltartaric acid, and the hydrobromide of the amide of (Burton), 1884, A., 62.
Diphenyltaurocarbamic anhydride (Andreasch), 1883, A., 664.
Diphenyltetrahydrofurfuran (Kapf and Paal), 1889, A., 148.
Diphenyltetrahydrophenanthroline (Schiff and Vanni), 1890, A., 139.
Diphenyltetrazine and methiodide of (Ruhemann), 1889, T., 244, 245.
  bromo-derivatives of (Ruhemann), 1889, T., 246.
  nitro- (Ruhemann), 1890, T., 51.
αμ-**Diphenylthiazole** (Hubacher), 1891, A., 221.
Diphenylthiazolecarboxylthiamide (Bladin), 1892, A., 638.
Diphenylthienylmethane (Levi), 1886, A., 787.
s-**Diphenylthiocarbamide** (*thiocarbanilide*) (Schiff and Vanni), 1892, A., 600.
  constitution of (Goldschmidt and Meissler), 1890, A., 500.
  melting point and crystalline form of (Losanitsch), 1886, A., 876.
  action of acetic acid on (Cain and Cohen), 1891, T., 329.
  action of acetic anhydride on (Werner), 1891, T., 396.
  action of allylic bromide on (Werner), 1890, T., 303; P., 33.
  action of benzylic chloride on (Werner), 1890, T., 297; P., 33.
  action of chloracetone on (Pawlewski), 1888, A., 473.
  action of ethoxalyl chloride on (v. Stojentin), 1884, A., 1159.
  action of silicon *tetra*bromide on (Reynolds), 1888, T., 857.
  action of water on (Cain and Cohen), 1891, T., 328.
  compounds of, with metallic salts (Rathke), 1884, A., 1018.
s-**Diphenylthiocarbamide,** *m*- and *p*-amido- (Lellmann and Würthner), 1885, A., 977.
  mono- and *di*-nitro-, action of iodine on (Losanitsch), 1883, A., 582.
as-**Diphenylthiocarbamide** (Werner), 1892, P., 96; (Paschkowetzky), 1892, A., 164.
Diphenylthiocarbazinic acid (Stahel), 1890, A., 1260.
Diphenylthiocarbimide, *m*-*mono*- and -*di*-nitro- (Steudemann), 1883, A., 801.
Diphenylthiohydantoin (Kossel), 1892, A., 468.
2:5-**Diphenylthiophen** (Kapf and Paal), 1889, A., 148.
Diphenyltolenylamidine (Glock), 1888, A., 1290.
Diphenyl-*p*-toluylamide (Lellmann and Bonhöffer), 1887, A., 935.
Diphenyl-*p*-tolylbiuret (Pawlewski), 1888, A., 474.
Diphenyltolylcarbinol, *tri*amido-. See Rosaniline.
Diphenyltolylcarbinol-*m*-carboxylic acid (v. Hemilian), 1884, A., 323.
Diphenyl-*m*-tolylenediamine and its derivatives (Zega and Buch), 1886, A., 873.
Diphenyltolylenedicarbamide (Kühn), 1885, A., 979; (Leuckart), 1890, A., 760.
Diphenyl-*m*-tolylenethiocarbamide (Billeter and Steiner), 1886, A., 234.
Diphenyl-*p*-tolylene*di*thiocarbamide (Lellmann and Würthner), 1885, A., 977.
Diphenyltolylenic *di***carbamate** (Snape), 1886, T., 258.
Diphenyl-*p*-tolylguanidine (Huhn), 1886, A., 1036.
Diphenyl-*m*-tolylmethane (v. Hemilian), 1884, A., 322.
Diphenyltolylmethane, *tri*amido-. See Leucaniline.
Diphenyl-*p*-tolylmethanecarboxylic acid [m.p. 217°] (v. Hemilian), 1884, A., 322.
Diphenyl-*p*-tolylmethanecarboxylic acid [m.p. 155°] (Gresly), 1886, A., 1035.
3′:4′-**Diphenyl-1′-tolylmethyldihydroquinoxaline** (Fischer), 1891, A., 748.
2″:3″-**Diphenyl-4″-tolylnaphthadihydroquinoxaline** (Fischer), 1892, A., 1474.
2″:3″-**Diphenyl-4″-tolylnaphthahydronaphthazonium hydroxide** (Fischer), 1892, A., 1474.

p-**Diphenyltolylphosphine** and its derivatives (Dörken), 1888, A., 833.

2:5-**Diphenyl-*o*-tolylpyrrole** (Paal and Braikoff), 1890, A., 263.

2:5-**Diphenyl-*p*-tolylpyrrole** (Baumann), 1887, A., 736.

Diphenyl-*o*- and **-*p*-tolylpyrrolecarboxylic acids** (Paal and Bbaikoff), 1890, A., 263.

Diphenyltriazenylamidoxime (Bladin), 1889, A., 978.

Diphenyltriazenyl-benzenyl- and **-ethenyl-azoximes** (Bladin), 1889, A., 978.

Diphenyl-triazole and **-triazolecarboxylic acid** (Bladin), 1889, A., 703.

Diphenyltricarboxylic acid (Bamberger and Hooker), 1885, A., 906, 1070.

Diphenyltrimethylene*di*thiocarbamide (Lellmann and Würthner), 1885, A., 978.

αα-**Diphenyltrimethylenic cyanide** (Zelinsky and Feldmann), 1890, A., 384.

Diphenylurazine (Pinner), 1888, A., 1084.

Diphenylurethane, and its derivatives (Hager), 1886, A., 59.

Diphenylvinylic nitrite (Anschütz and Romig), 1886, A., 1034.

Diphenyl-*o*-xylylenediamine (Leser), 1884, A., 1313.

Diphenyl-*o*- and **-*m*-xylylmethanes** (v. Hemilian), 1887, A., 267, 266.

Diphenyl-*p*-xylylmethane and its products of oxidation (v. Hemilian), 1884, A., 321.

Diphenyl-*m*-xylylpyrrole (Paal and Braikoff), 1890, A., 263.

Diphloroglucinolcarboxylic acid (Schiff), 1888, A., 840.

Diphosphoric acid, *mono-* and *di*imido- (Mente), 1889, A., 210.

Diphosphormonamic acid, *di*imido- (Mente), 1889, A., 210.

Diphthalide ether (Racine), 1887, A., 951.

Diphthalyl (Graebe and Guye), 1885, A., 267.
  and its derivatives (Wislicenus), 1885, A., 57; (Roser), 1885, A., 267; (Graebe and Schmalzigaug), 1885, A., 797; (Graebe and Guye), 1886, A., 882.
  bromide, crystalline form of (Soret), 1886, A., 619.

Diphthalyl, *tetra*chloro-, and nitro- (Graebe and Guye), 1886, A., 882.

Diphthalylamidoethyl sulphide (Gabriel), 1891, A., 815.

Diphthalyldi-*p*-benzidine (v. Bandrowski), 1884, A., 1015.

Diphthalyldiethylenephenyltriamine (Gabriel), 1889, A., 1166.

Diphthalylditrimethylenetriamine (Goldenring), 1890, A., 976.

Diphthalylethane (*ethinediphthalyl*) (Roser), 1885, A., 165.
  mono- and *di*-nitro- (Gabriel), 1886, A., 620.

*iso***Diphthalylethane** (Roser), 1885, A., 267.

Diphthalylethane anhydride (Roser), 1885, A., 165.

Diphthalylic acid (Graebe and Juillard), 1888 A., 154; (Juillard), 1888, A., 707.

Diphthalylimide (Graebe and Guye), 1886, A., 883.

Diphthalylimidoethylic sulphide (Gabriel), 1892, A., 130.
  *di*sulphide (Coblentz and Gabriel), 1891, A., 817.
  sulphoxide (Gabriel), 1891, A., 816; 1892, A., 130.

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γ-**Diquinolyldisulphonic acid** and its salts (Roser), 1884, A., 1371.

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m:m-**Ditolyl** (Stolle), 1888, A., 699; (Perrier), 1892, A., 851; (Loewenherz), 1892, A., 852.
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p-**Ditolyldiketopiperazine** (Bischoff), 1888, A., 727; (Conrad and Limpach), 1888, A., 854.
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p-**Ditolyl-αγ-diketopiperazines** (Bischoff and Hausdörfer), 1890, A., 1284; 1892, A., 1337.
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Ethoxyethylhydroquinoline ethiodide (Kohn), 1886, T., 505.

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Ethoxyhydrocotarnine methiodide (Hector), 1890, A., 531.

p-**Ethoxyhydrocoumarilic acid** (Will and Beck), 1886, A., 882.

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p-**Ethoxymethylaniline** (Bischoff and Nastvogel), 1889, A., 1012.

Ethoxymethylbenzidine (Nölting and Werner), 1891, A., 213.

γ-**Ethoxymethyl-ψ-carbostyril** (Friedländer and Müller), 1887, A., 978.

β-**Ethoxymethylcrotonic acid** (Friedrich), 1883, A., 969.

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α-**Ethoxymethylhydroquinoline** (Fischer), 1883, A., 1147.
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3-Ethoxy-1-methyl-4-propylbenzene (*thymol ethyl ether*), 2-bromo- and 2:5-bromamido- (Mazzara and Vighi), 1890, A., 883.
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α-**Ethoxynaphthalene**, nitro-derivatives of (Heermann), 1891, A., 1379.
β-**Ethoxynaphthalene** (*naphthyl ethyl ether*), 1′:4′-*di*nitr- (Onufrowicz), 1891, A., 321.
β-**Ethoxynaphthalene,** 1-nitro-, and action of ammonia on (Wittkampf), 1884, A., 1036.
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  α-nitroso- (v. Ilinski), 1886, A., 474.
4-Ethoxynaphthaquinone, 3-chloro- (Zincke), 1888, A., 710.
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1:4-Ethoxynaphthylamine (*amidonaphthyl ethyl ether*) and its derivatives (Grandmougin and Michel), 1892, A., 862; (Heermann), 1892, A., 1097.
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p-**Ethoxyphenylamidoacetic acid** (Bischoff and Nastvogel), 1889, A., 1011.
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p-**Ethoxyphenylcarbamide** (Berlinerblau), 1885, A., 148.
o-**Ethoxyphenylchloracrylic acid** (Fittig and Claus), 1892, A., 989.
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m-**Ethoxy-*o*-phenylenediamine** (Autenrieth and Hinsberg), 1892, A., 160.
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p-**Ethoxyphenylhydrazine** and its salts (Stolz; Altschul), 1892, A., 1080, 1081.
p-**Ethoxyphenylhydrazinesulphonic acid** and its salts (Altschul), 1892, A., 1082, 1081.
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p-**Ethoxyphenylimidodiacetic acid,** ethoxyanilide of (Bischoff and Nastvogel), 1889, A., 1012.
1-Ethoxyphenyl-3-methyl-5-pyrazolone (Stolz), 1892, A., 1080.
5-Ethoxy-1-phenyl-3-methyl-6-pyridazone (Ach), 1890, A., 71.
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3-Ethoxy-1-phenylpyrazoline, 4-brom- (Fischer and Knoevenagel), 1887, A., 933.
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p-**Ethoxyphenyl-*p*-tolylethylamine** (Hatschek and Zega), 1886, A., 457.
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α-**Ethoxypropanilide** (Bischoff and Hausdörfer), 1892, A., 1337.

α-**Ethoxypyridine** (v. Pechmann and Baltzer), 1892, A., 209.

α-(?)**Ethoxypyridine**, *di*chlor- (Koenigs and Geigy), 1884, A., 1369.

β-**Ethoxypyridine** (Fischer and Renouf), 1884, A., 1370; (Weidel and Blau), 1886, A., 77.

6-**Ethoxypyridine**, 2:3:5-*tri*chloro-4-amido- (Stokes and v. Pechmann), 1887, A., 157.

6-**Ethoxy-2-pyridone-3:5-dicarboxylic acid** (Guthzeit and Dressel), 1889, A., 861.

3-**Ethoxyquinol** (Will and Pukall), 1887, A., 661.

1-**Ethoxyquinoline** (Fischer), 1883, A., 1146; (Fischer and Renouf), 1884, A., 1049.

1-**Ethoxyquinoline**, derivatives of (Vis), 1892, A., 1105.
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1′-**Ethoxy***iso***quinoline**, 3′-chlor- (Gabriel), 1887, A., 62.

α-**Ethoxy-*β*-quinolinecarboxylic acid** (Friedländer and Göhring), 1884, A., 1020.

3-**Ethoxy-1:4-quinone** (Will and Pukall), 1887, A., 661.

3-**Ethoxyquinone**, 6-chloro-2:5-*di*amido- (Kehrmann), 1891, A., 904.

p-**Ethoxyquinoxaline** (Autenrieth and Hinsberg), 1892, A., 732.

p-**Ethoxyquinoxalinedicarboxylic acid** (Autenrieth and Hinsberg), 1892, A., 733.

o-**Ethoxystyrene**, *α*-brom- (Fittig and Claus), 1892, A., 989.

Ethoxystyrylhydantoin hydrobromide (Pinner and Spilker), 1889, A., 706.

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Ethoxysuberic acid and its salts (Hell and Rempel), 1885, A., 755; (Hempel), 1885, A., 756.

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α-**Ethoxy-*ar*-tetrahydronaphthalene** (Bamberger and Bordt), 1890, A., 509.

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Ethoxythioxyl chloride, decomposition of, on distillation (Geuther), 1884, A., 1256.

2-**Ethoxytoluene** (*tolyl ethyl ether*), preparation of (Staedel), 1883, A., 585.

Ethoxytoluene, brom- and imido- (Schreiber), 1891, A., 552.

3-**Ethoxytoluene**, 4:6-*di*nitr- and 2:4:6-*tri*nitr- (Staedel and Kolb), 1891, A., 187.

2-**Ethoxytoluene-3:5-disulphonic acid** (Limpricht), 1885, A., 1233.

2-**Ethoxytoluene-4-sulphonic acid** (Heffter), 1884, A., 454.

4-**Ethoxy-*m*-toluic acid** (COOH:Me = 1:3) (Brown), 1883, A., 471.

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6-**Ethoxy-*m*-xylene-4-sulphonic acid** (Limpricht), 1885, A., 1234.

4 **Ethoxy-*m*-xylene-6-sulphonic acid** (Moody), 1891, P., 190.

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  *iso*butyl ketone and oxidation of (Wagner), 1892, A., 36.
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Ethylacetanilide (Pictet), 1890, A., 758.
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p-**Ethylacetotoluidide**, *m*-nitr- (Niementowski), 1887, A., 938.

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Ethylacetylacetone (Combes), 1887, A., 653.
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γ-**Ethyl-γ-acetylbutyric acid** (Fittig and Christ), 1892, A., 962.

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α-**Ethyl-β-acetylpropionic acid** (Young), 1883, T., 173.
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Ethylallylthiocarbamide (Hecht), 1890, A., 477.

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Ethylamidoacetic hydrochloride, action of nitrous acid on (Curtius), 1884, A., 42.
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Ethylamidoacetocyamidine, a new creatinine (Duvillier), 1886, A., 1046.

o-**Ethylamidoacetophenone** (v. Baeyer), 1884, A., 1021.

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o-**Ethylamidobenzamide** (Finger), 1888, A., 948.

Ethylamidobenzoic acid, *o*-sulpho-, potassium salt of (Fahlberg and List), 1887, A., 835.

Ethylamido-α-butyrocyamidine (Duvillier), 1884, A., 613.

Ethylamidocarbamidobenzoic acid, and its salts (Griess), 1885, A., 1226.

Ethyl-*o*-amidocinnamic acid, and nitroso- (Fischer and Kuzel), 1884, A., 440.

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Ethylamidoethylpiperonylcarboxylic anhydride (Perkin), 1890, T. 1035.

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α-**Ethylamido-α-naphthaphenazine** (Eicker), 1891, A., 470.

α-**Ethylamido-α-naphthatolazine** (Eicker), 1891, A., 471.

p-**Ethylamido-*m*-nitrobenzophenone** (Schöpff), 1892, A., 336.

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Ethylamido-β-phenylpropionic acid, nitroso- (Fischer and Kuzel), 1883, A., 1132.

Ethylamidopiperonyl-ω-carboxylic anhydride (Perkin), 1891, T., 158.

α-**Ethylamidopropionic acid** (Duvillier), 1885, A., 373.

α-**Ethylamidopropionocyamidine** (Duvillier), 1885, A., 819.

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β-**Ethylasparagine** (Piutti), 1889, A., 591.
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Ethylbenzaldoximes, *α*- and *β*- (Beckmann), 1889, A., 607.
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  β-bromo-*m*-nitr- (Elfeldt), 1892, A., 213.
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p-**Ethylbenzamide** [m.p. 115°—116°] (Gattermann and Rossolymo), 1890, A., 975.
p-**Ethylbenzanilide** (Smith), 1892, A., 488.
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Ethylbenzoyl-*p*-nitranilide (Meldola and Salmon), 1888, T., 779.

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Ethylbenzyl-. See also Benzylethyl-.

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Ethylbismuthine iodide (Marquardt), 1887, A., 803.

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Ethyl*di*bromomaleimide (Zanetti), 1890, A., 907.

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Ethylbutylacetaldehyde (Raupenstrauch), 1887, A., 794.

Ethylbutylbenzene (Baur), 1891, A., 1466.

Ethyl*iso*butylglyoxaline (*oxalethylisoamyline*) (Radziszewski and Szul), 1884, A., 986.

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s-**Ethyl*iso*butylthiocarbamide** (Hecht), 1892, A., 702.

α-**Ethylbutyrolactone** (Chanlaroff), 1885, A., 374.

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α-**Ethylcarboxyphenylacetic acid,** imide of (*ethylhomo-o-phthalimide*) (Gabriel), 1887, A., 1113.

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4′-**Ethyl*di*chloro*iso*quinoline** (Gabriel), 1887, A., 1113.

α-**Ethyl-*β*-chlorotetracrylic acid** (Koll), 1889, A., 488.

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α-**Ethylcinchonic acid** (Doebner), 1887, A., 504.

α-**Ethylcinnamaldehyde,** *m*-nitr- (v. Miller and Rohde), 1889, A., 984.

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Ethylcitraconic acid and anhydride (Fittig), 1891, A., 453.

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α-**Ethylcoumarin** (Fittig and Brown), 1890, A., 777.

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  thio- (Aldringen), 1890, A., 624.

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α-**Ethylcoumaroxime** and its acetate (Aldringen), 1890, A., 624.

α-**Ethylcoumarphenylhydrazide** (Aldringen), 1890, A., 624.

- **Ethylcoumazonic acid** (Widman), 1884, A., 304.
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- **Ethylcyanacetamide** (Henry), 1887, A., 796.
- **Ethylcyanethine** (v. Meyer), 1883, A., 353.
- **Ethylcyanocamphor** (Haller), 1891, A., 1499.
- **Ethylcystein** (Brenzinger), 1892, A., 1111.
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- **Ethyldeoxybenzoin** (Meyer and Oelkers), 1888, A., 703.
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- **Ethyldihydrostyrylpyridine** (Plath), 1889, A., 164.
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- **Ethyldiosphenol** (Shimoyama), 1888, A., 1205.
- **Ethyldipropylamine** (Passon), 1891, A., 1118.
- **Ethyldipropylcarbinol** (*nonylic alcohol*) (Tschebotareff and Saytzeff), 1886, A., 437.
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  - *as-di*chlor- (Henry), 1884, A., 719.
  - *tetra*chlor-, thermochemistry of (Berthelot and Matignon), 1891, A., 1311.
  - *as-*chloriod- (Henry), 1884, A., 719, 831.
  - *di*iod- (*acetylenic diiodide*), isomeric varieties of (Keiser), 1890, A., 594; (Paternò and Peratoner), 1890, A., 1219; 1891, A., 654.

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Ethylenebisphenylenediamine (Gattermann and Hager), 1884, A., 1142.

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Ethylenecarbamide (Fischer and Koch), 1886, A., 528.

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- **Ethylene-mercaptandipyruvic and -mercaptolepyruvic acids** (FASBENDER), 1888, A., 805.
- **Ethylenemethyl-.** See Methylethylene-.
- **Ethylene*di*nitro- carbamide or -ureine** (FRANCHIMONT and KLOBBIE), 1889, A., 126.
- **Ethylene-ψ-selenocarbamide** (BARINGER), 1890, A., 880.
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- **Ethylene*di*thiodicarbamide** (SCHATZMANN), 1891, A., 744.
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  - chloride, action of phosphoric chloride on (COLSON and GAUTIER), 1886, A., 680.
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  - chlorothiocyanate, preparation of (JAMES), 1885, T., 39; 1885, T., 365; P., 47.
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  - action of *Bacterium aceti* on (BROWN), 1887, T., 638.
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  - oxidation of, in alkaline solution with lead peroxide (GLÄSER and MORAWSKI), 1890, A., 20.
  - compounds of, with aldehydes (LOCHERT), 1888, A., 670.
  - compound of chloral with (DE FORCRAND), 1889, A., 689.
  - sodium (DE FORCRAND), 1888, A., 1238.
    - alcoholates of (DE FORCRAND), 1889, A., 367, 562.
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  - phenylcarbamate (SNAPE), 1885, T., 773.
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  - imidothioacetate hydrobromide (GABRIEL and HEYMANN) 1891, A., 702.
  - imidothiobenzoate hydrobromide (GABRIEL and HEYMANN), 1891, A., 701.
  - mercaptan dibenzoate (GABRIEL and HEYMANN), 1891, A., 701.
  - α- and β-naphthylimidonaphthylthiocarbamates (EVERS), 1888, A., 601.
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α-**Ethylhomo-*o*-phthalimide** (*imide of α-ethylcarboxyphenylacetic acid*) (Gabriel), 1887, A., 1113.
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  - α-bromacetate, action of potassium cyanide on (Zelinsky and Bitschichin), 1889, A., 377.
  - bromacetate, chlor- (Henry), 1884, A., 421.
  - bromacetoacetate (Nef), 1892, A., 143; (Haller and Held), 1892, A., 818.
  - *di*bromadipate (Ruhemann and Blackman), 1890, T., 372.
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  - *di*brom-*o*-amidophenylvalerate hydrochloride (Diehl and Einhorn), 1887, A., 486.
  - bromanilido*di*nitrophenylmalonate (Jackson and Bancroft), 1890, A., 982.
  - α-bromethylacetoacetate (Nef), 1892, A., 144.
  - ω-bromethylacetoacetate (Freer and Perkin), 1887, T., 833; A., 33.
  - bromethylamido-α-crotonate (Gabriel), 1891, A., 817.
  - bromide, molecular refraction and dispersion of (Gladstone), 1891, T., 295.
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  - *p*-bromobenzenesulphonate (Krafft and Roos), 1892, A., 1220.
  - *p*-bromobenzoate (Errera), 1887, A., 1107.
  - α-bromobutyrate, action of triethylamine on (Duvillier), 1890, A., 234.
  - αβ-*di*bromobutyrate (Palmer), 1889, A., 686; (Michael and Schulthess), 1891, A., 1184.
  - α-bromo*iso*butyrate, action of, on ethylic propylmalonate and *iso*propylmalonate (Bischoff and Tigerstedt), 1890, A., 1103.
  - bromocinnamate, conversion of, into ethylic benzoylacetate (Michael and Browne), 1886, A., 703.
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  - bromoctylate (Auwers and Bernhardi), 1891, A., 1190.
  - α-bromœnanthylate (Hell and Schüle), 1885, A., 757.
  - bromofumarate (Pum), 1888, A., 1058.
    - action of potassium ethoxide on (Mulder and Welleman), 1889, A., 376.
  - γ-bromo*iso*hexoate (Bredt), 1886, A., 531.
  - *di*bromohydromuconate (Ruhemann and Dufton), 1891, T., 752.
  - *di*- and *tetra*-bromoketipates (Fittig, Daimler and Keller), 1889, A., 491.
  - *mono*- and *di*-bromomaleates (Pum), 1888, A., 1058.
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  - bromo*di*nitrophenylacetoacetate (Jackson and Moore), 1889, A., 781; 1890, A., 772.
  - bromo*di*nitrophenylmalonate (Jackson and Robinson), 1888, A., 1091; 1890, A., 377; (Jackson), 1889, A., 880.
    - nitrite (Jackson and Bentley), 1892, A., 1219.
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    - nitrite (Jackson and Bentley), 1892, A., 1217.
  - *di*bromo*di*nitrophenylmalonate (Jackson and Bancroft), 1890, A., 982.
  - bromo*tri*nitrophenyltartronate (Jackson and Bentley), 1892, A., 1218.
  - *di*bromopentanetetracarboxylate (Perkin and Prentice), 1891, T., 827.

- **Ethylic** *di*bromophenylpropionate, melting point of (Aronstein and Holleman), 1889, A., 878.
  - bromophloroglucinoldicarboxylate (Bally), 1888, A., 956.
  - α-bromopropionate (Zelinsky), 1887, A., 912; (Duvillier), 1890, A., 234.
    - action of potassium cyanide on (Zelinsky), 1889, A., 122.
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  - bromopropylacetoacetate, preparation of (Lipp), 1886, A., 218.
  - bromopyromucate (Hill and Sanger), 1886, A., 447.
  - *di*bromoquinonehydrodicarboxylate (Böniger), 1888, A., 954.
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  - bromostearate (Auwers and Bernhardi), 1891, A., 1190.
  - bromosuccinate, action of ammonia on (Körner and Menozzi), 1887, A., 1031.
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  - α-brom*iso*valerate, action of, on sodium malonic ether (Roser), 1884, A., 423.
  - bromundecylenate (Noerdlinger), 1890, A., 1237.
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  - butanetricarboxylate (Polko), 1888, A., 134; (Bischoff and v. Kuhlberg), 1890, A., 743.
  - *iso*butanetricarboxylate (Leuckart), 1885, A., 1201; (Barnstein), 1888, A., 135; (Barthe), 1889, A., 588; (Bischoff and v. Kuhlberg), 1890, A., 743; (Bischoff), 1891, A., 292.
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  - α-*iso*butyl-β-amidocrotonate (Peters), 1890, A., 1097.
  - β-*iso*butylamidoglutaconate (Emery), 1891, A., 422.
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  - *n*- and *iso*-butyrocyanacetates (Haller), 1888, A., 818.
  - butyromalonate (Lang), 1887, A., 717.
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  - carbacetoacetate, so-called (Polonowska), 1886, A., 1011; (Hantzsch), 1892, A., 819.
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  - chlorofumarate (Perkin), 1888, T., 700.
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  - γ-chloro*iso*hexoate (Bredt), 1886, A., 531.
  - *tri*chloro-*p*-hydroxybenzoylfurfuran-α-methyl-β-carboxylate (Ikuta), 1892, A., 609.
  - *tetra*chloro-α-hydroxy- and *di*chlorohydroxyketo-hydrindenecarboxylates (Zincke and Arnst), 1892, A., 858.
  - chlorolevulinate, action of, on ethylic sodomalonate (Conrad and Guthzeit), 1886, A., 336.
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  - α-chloromethylacetoacetate (Rubleff), 1891, A., 223.
  - β-*di*chloromuconate (Ruhemann and Elliott), 1890, T., 933.
  - chloronaphthalenesulphonate (Cleve), 1889, A., 155.
  - αβ-*di*chloro-naphthyl-, -propyl- and -*iso*-propyl-carbamates (Otto), 1891, A., 1374.
  - *di*chloronicotinate (Seyfferth), 1887, A., 158.
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  - β-chlorophthalate (Graebe and Rée), 1886, T., 529.
  - *di*chlorophthalate (Le Royer), 1887, A., 832.
  - chloropropenyltricarboxylate (Bischoff), 1890, A., 1101.
  - β-*di*chloropropionate (Fromme and Otto), 1887, A., 913.
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  - *tri*chloroquinolacetoacetate (Ikuta), 1892, A., 608.
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  - *di*chloroquinoldicarboxylate (Hantzsch and Zeckendorf), 1888, A., 278; (Hantzsch and Herrmann), 1888, A., 954.
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- **Ethylic** cyanethinecarboxylate (v. Meyer), 1885, A., 140.
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  - *o*-*di*cyanobenzylacetoacetate (Gabriel and Hausmann), 1889, A., 1172.
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- **Ethylic** dehydrobenzoylacetate, preparation and properties of (PERKIN), 1885, T., 283.
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  - diallylmalonate (MATVÉEFF), 1889, A., 124.
    - magnetic rotation of (PERKIN), 1886, T., 209; P., 153.
  - dianilidosuccinate (GORODETZKY and HELL), 1888, A., 951.
  - dianisylimidothiocarbamate (FOERSTER), 1888, A., 945.
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  - dibenzoylcomenamate (OST), 1885, A., 49.
  - dibenzoyldioxy-pyromellitate and -terephthalate (NEF), 1890, A., 985, 986.
  - αω-dibenzoylhexoate (KIPPING and PERKIN), 1889, T., 347.
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  - dihydroxyterephthalate (Nef), 1890, A., 986.
  - *p*-diketohexamethylenetetracarboxylate (Nef), 1887, A., 257; 1888, T., 455.
    - derivatives of (Nef), 1889, A., 509.
  - diketohydrindenecarboxylate (Wislicenus), 1888, A., 1193.
  - dimethoxydiethylacetoacetate (James), 1886, T., 57.
  - dimethoxyterephthalate (Nef), 1890, A., 986.
  - αα′-dimethylacetonedicarboxylate (Dünschmann and v. Pechmann), 1891, A., 674.
  - 2:4-dimethyl-5-acetylpyrrole-3-carboxylate (Magnanini), 1889, A., 57.
  - dimethylamidobenzeneazophenyldimethylpyridinedicarboxylate (Lepetit), 1887, A., 1053.
  - 2:6:4-dimethyl-*iso*butyl- and -*iso*propyl-hydropyridine-3:5-dicarboxylates (Engelmann), 1886, A., 259.
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  - dimethyl*di*cyano- adipate and -pimelate (Zelinsky), 1892, A., 430.
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  - dimethyldicarboxyglutarate (Guthzeit and Dressel), 1890, A., 878.
  - αβ-dimethylglycidate (Melikoff and Zelinsky), 1888, A., 1056.
  - 2:6:4-dimethylhexyl-pyridine-3:5-dicarboxylate and -hydropyridinedicarboxylate (Jaeckle), 1888, A., 1104.
  - dimethylhydropyridinedicarboxylate (Griess and Harrow), 1888, A., 1313.
  - dimethylic phosphate (Lossen and Köhler), 1891, A., 1015.
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  - dimethylpyridinecarboxylate [b.p. 260°] (Canzoneri), 1885, A., 751.
  - αγ-dimethylpyridine-β-carboxylate (Michael), 1885, A., 1244.
  - 2:6-dimethylpyridine-3:5-dicarboxylate (Engelmann), 1886, A., 259.
  - 2:6:4-dimethylpyridone-3:5-dicarboxylate (Conrad and Guthzeit) 1886, A., 334.
  - 2:6:4-dimethylpyrone-3:5-dicarboxylate (Conrad and Guthzeit), 1887, A., 502; (Peratoner and Strazzeri), 1891, A., 1334.
    - action of ammonia and of primary amines on (Conrad and Guthzeit), 1887, A., 500.
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  - 2:5-dimethylpyrrolinecarboxylate, formation of (Hantzsch), 1890, A., 1155.
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  - 2:4-dimethylpyrroline-3:5-dicarboxylate (Knorr), 1887, A., 276.
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- **Ethylic** diphenyl-chloracetate and -cyanacetate (Bickel), 1889, A., 999.
- 5-diphenyl-α-dimethyldipyrrol-1-ethylene-β-dicarboxylate (Paal and Schneider), 1887, A., 273.
- β-diphenyl-α-ethylsulphonebutyrate (Autenrieth), 1891, A., 205.
- αα-diphenylfurfuran-β-carboxylate (Kapf and Paal), 1889, A., 148.
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- 2:5-diphenylpyrrole-β-carboxylate (Kapf and Paal), 1888, A., 840; 1889, A., 148.
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- β-diphenylsulphonebutyrate (Autenrieth), 1891, A., 204.
- 2:5-diphenyl-1-*o*- and *p*-tolylpyrrolecarboxylates (Paal and Braikoff), 1890, A., 263.
- diphthalate (Graebe and Juillard), 1888, A., 154.
- dipropyldicarboxyglutarate (Guthzeit and Dressel), 1890, A., 878.
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- duroquinonecarboxylate (Nef), 1887, A., 255.
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- ethoxyethylacetoacetate (Isbert), 1886, A., 1010.
- 6-ethoxy-2-hydroxypyridine-3:5-dicarboxylate (Guthzeit and Dressel), 1891, A., 939.
- 2′-ethoxy-4′-hydroxyquinoline-3′-carboxylate (Bischoff), 1889, A., 519.
- ethoxyhydroxyquinoxalineacetate (Autenrieth and Hinsberg), 1892, A., 733.
- ethoxymethylacetoacetate (Isbert), 1886, A., 1010.
- ethoxyoctoate (Hantzsch), 1889, A., 372.
- ethoxyoxalacetate (Wislicenus and Scheidt), 1891, A., 545.
  - phenylhydrazone (Wislicenus and Scheidt), 1892, A., 458.
- *o*-ethoxyphenylglycinate (Vater), 1884, A., 1144.
- 6-ethoxy-α-pyrone-3:5-dicarboxylate (Guthzeit and Dressel), 1889, A., 860; 1891, A., 939.
- 6-ethoxy-α-pyridone-3:5-dicarboxylate (Guthzeit and Dressel), 1891, A., 939.
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  - hydroxyphenylacetate (Alexander), 1890, A., 1135.
  - *p*-hydroxyphenylacetate (Salkowski), 1889, A., 1173.
  - *m*-hydroxyphenyldimethylpyridinedicarboxylate (Lepetit), 1887, A., 1053.
  - 1-*o*-hydroxyphenyl-2:5-diphenylpyrrole-3-carboxylate (Paal and Braikoff), 1890, A., 264.
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- **Hexamethylparaleucaniline** (Rathke), 1886, A., 460.
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- *n*-**Hexane** (*dipropyl; ethylbutane*),
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  - *di*amido-, and its derivatives (Tafel), 1889, A., 976; (Tafel and Neugebauer), 1890, A., 1000.
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n-**Hexoic acid** (*caproic acid*) (Perkin), 1883, T., 59; (van Romburgh), 1888, A., 447.
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p-**Hydroxybenzaldehyde,** action of zinc chloride on (Bourquin), 1884, A., 1164.

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Hydroxybenzaldehydes, nitro-, and their methyl-derivatives (Tiemann), 1889, A., 1168.

o-**Hydroxybenzaldehydeacetic acid,** *di*thio- (Bongartz), 1886, A., 937.

Hydroxybenzaldehydephenylhydrazones, *m*- and *p*- (Rudolph), 1889, A., 251, 252.

p-**Hydroxybenzaldoxime** (Lach), 1883, A., 1104.

p-**Hydroxybenzamide,** reduction of (Hutchinson), 1890, T., 957.

Hydroxybenzenes, heat equivalent of (Stohmann), 1886, A., 655.

heat equivalent of the hydroxyl-groups in (Stohmann), 1886, A., 656.

condensation of, with nitrobenzaldehydes (Siboni), 1892, A., 621.

m-**Hydroxybenzenylamidoxime** (Clemm), 1891, A., 699.

p-**Hydroxybenzenylamidoxime** (Krone), 1891, A., 700.

Hydroxybenzenylazo-. See Azo-.

m-**Hydroxybenzenylphenylhydrazone** (Clemm), 1891, A., 699.

o-**Hydroxybenzhydrazoine** (Cornelius and Homolka), 1886, A., 1026.

p-**Hydroxybenzide** and its derivatives (Klepl), 1884, A., 446.

Hydroxybenzidine. See Hydroxy*di*amidodiphenyl.

o-**Hydroxybenzoic acid.** See Salicylic acid.

m-**Hydroxybenzoic acid,** absorption spectrum of (Hartley), 1888, T., 658.

action of baryta on (Klepl), 1883, A., 664.

action of phosphoric chloride on (Anschütz and Moore), 1887, A., 947.

sodium salt of, action of phosphorus oxychloride on (Richter), 1884, A., 325.

m-**Hydroxybenzoic acid,** 4-amido- (Limpricht), 1891, A., 1037.

tri- and *tetra*-chloro- (Zincke and Walbaum), 1891, A., 709.

iodo- (Limpricht), 1891, A., 1037.

nitro-derivatives (Griess), 1887, A., 485.

2-nitro- (Thieme), 1891, A., 917.

p-**Hydroxybenzoic acid,** absorption spectrum of (Hartley), 1888, T., 661.

dry distillation of (Klepl), 1884, A., 446.

p-**Hydroxybenzoic acid,** action of phosphoric chloride on (Anschütz and Moore), 1887, A., 947.

calcium salt of, products of the distillation of (Goldschmiedt), 1883, A., 664.

sodium salt of, action of phosphorus oxychloride on (Richter), 1884, A., 325.

p-**Hydroxybenzoic acid,** *di*bromo- (Balbiano), 1883, A., 1125.

constitution of (Alessi), 1886, A., 65.

*di*chloro- (Claus and Riemann), 1883, A., 1112; (Zincke and Walbaum), 1891, A., 710.

nitro-derivatives (Griess), 1887, A., 485.

Hydroxybenzoic acids, electrical conductivity of (Berthelot), 1890, A., 677.

heats of combustion and formation of (Stohmann, Kleber and Langbein), 1889, A., 1096.

heats of formation and transformation of (Berthelot and Werner), 1885, A., 1103.

heats of neutralisation and solution of (Berthelot and Werner), 1885, A., 1032.

action of heat on (Graebe and Eichengrün), 1892, A., 1208.

action of aniline on substitution derivatives of (Limpricht), 1890, A., 158; (Seifert), 1890, A., 490.

action of chlorine on (Zincke and Walbaum), 1891, A., 708.

action of diazo-compounds with (Zibell), 1891, A., 1473.

action of iodine on, in alkaline solution (Messinger and Vortmann), 1889, A., 1151.

nitration of, with nitrous acid (Deninger), 1891, A., 307.

inversion of cane sugar by (Koral), 1886, A., 932.

azo-dyes from (v. Kostanecki and Zibell), 1891, A., 1038.

ammonium and aniline salts of, electrical conductivities of the (Berthelot), 1890, A., 1039.

ethylene ethers of (Wagner), 1884, A., 433.

o-**Hydroxybenzonitrile** (Meyer), 1888, A., 266; (Tiemann), 1888, A., 276.

p-**Hydroxybenzonitrile** (Klepl), 1884, A., 447.

o-**Hydroxybenzophenone** (Heiber), 1892, A., 309.

Hydroxybenzophenones, *m*- and *p*-, and their oximes (Smith), 1892, A., 489, 490.

Hydroxybenzotropeine and its salts (Ladenburg), 1883, A., 671.
p-**Hydroxybenzoyl-*p*-hydroxybenzoic acid** (Klepl), 1884, A., 447.
p-**Hydroxybenzoylpiperidine** (Schotten), 1888, A., 1106.
o-**Hydroxybenzylacetamide** (Goldschmidt and Ernst), 1890, A., 1411.
o-**Hydroxybenzylamine** (*salicylamine*) (Goldschmidt and Ernst), 1890, A., 1411; (Tiemann), 1891, A., 50.
p-**Hydroxybenzylamine** (Salkowski), 1889, A., 1173.
Hydroxybenzylanilines, *o*- and *p*- (Emmerich), 1888, A., 50, 51.
Hydroxy-*m*-benzylbenzoic acid (*m-benzhydrilbenzoic acid*) and its salts (Senff), 1884, A., 428.
o-**Hydroxybenzylcarbamide** (Goldschmidt and Ernst), 1890, A., 1411.
4-**Hydroxy-6-benzyl-*m*-diazine-2-carboxylic acid** (Pinner), 1889, A., 1008.
6-**Hydroxy-2-benzyl-4:5-dimethyl-*m*-diazine** (Pinner), 1889, A., 1008.
δ-**Hydroxy-γ-benzylhexoic acid**, lactone of (Fittig and Christ), 1892, A., 963.
2-**Hydroxybenzyl-6-hydroxy-4-methyl-*m*-diazine** (Pinner), 1891, A., 63.
2-**Hydroxybenzyl-6-hydroxy-4-methyl-5-ethyl-*m*-diazine** (Pinner), 1891, A., 63.
o-**Hydroxybenzylic alcohol.** See Saligenin.
p-**Hydroxybenzylic** alcohol (Biedermann), 1887, A., 38.
  cyanide (Salkowski), 1884, A., 1175; 1889, A., 1173.
Hydroxybenzylidene compounds (Emmerich), 1888, A., 50.
o-**Hydroxybenzylideneamidobenzamide** (Schiff), 1884, A., 455.
Hydroxybenzylideneamidodimethylanilines, *o*- and *p*- (Nuth), 1885, A., 784.
o-**Hydroxybenzylidene-*p*-amidodiphenylamine** (Hencke), 1890, A., 609.
Hydroxybenzylidene-*o*- and -*p*-amidophenols (Haegele), 1892, A., 1451.
o-**Hydroxybenzylideneazine** (Curtius and Jay), 1889, A., 393.
o-**Hydroxybenzylidenebisthioglycollic acid** (Bongartz), 1888, A., 478.
p-**Hydroxybenzylidenediacetonamine oxalate** (Antrick), 1885, A., 503.
Hydroxybenzylidenediphenylmaleide (Cohn), 1892, A., 483.
Hydroxybenzylidenefenchylamine (Wallach and Griepenkerl), 1892, A., 1239.
m-**Hydroxybenzylidene-4′-methylquinoline** (Heymann and Koenigs), 1888, A., 1114.
p-**Hydroxybenzylidene-4′-methylquinoline** (Heymann and Koenigs), 1888, A., 852.
p-**Hydroxybenzylidene-2′-methylquinoline** (Bulach), 1889, A., 528.
p-**Hydroxybenzylidenepinylamine** (Wallach and Lorentz), 1892, A., 997.
6-**Hydroxy-2-benzyl-4-methyl-*m*-diazine** (Pinner), 1889, A., 1007.
6-**Hydroxy-2-benzyl-4-methyl-5-ethyl-*m*-diazine** (Pinner), 1889, A., 1008.
o-**Hydroxybenzyl-4′-methylquinoline** (Heymann and Koenigs), 1888, A., 852, 1113.
p-**Hydroxybenzyl-4′-methylquinoline** (Heymann and Koenigs), 1888, A., 852.
Hydroxybenzyl-β-naphthylamines and **-β-naphthylnitrosamines**, *o*- and *p*- (Emmerich), 1888, A., 51.
o-**Hydroxybenzylphenylcarbamide** (Goldschmidt and Ernst), 1890, A., 1412.
Hydroxybenzylphosphinic acid (Fossek), 1886, A., 530.
Hydroxybenzylphosphinous acid (Ville), 1890, A., 618.
p-**Hydroxybenzylphthalimidine** (Hafner), 1889, A., 983; 1890, A., 487.
Hydroxybenzylphthalimidine, nitro- (Gabriel), 1885, A., 1230.
Hydroxybenzylpyrotartaric acid (*phenylhomoitamalic acid*), calcium salt of (Penfield), 1883, A., 473.
p-**Hydroxybenzylsulphonic acid** (Mohr), 1884, A., 69.
p-**Hydroxybenzylthiocarbimide** (Salkowski), 1889, A., 1174.
o-**Hydroxybenzyl-*p*-toluidine** (Emmerich), 1888, A., 50.
p-**Hydroxybenzyltoluidine** (Emmerich), 1888, A., 51.
Hydroxybenzyltrimethylenecarboxylic acid (Marshall and Perkin), 1891, T., 884.
γ-**Hydroxy-β-benzylvaleric acid** (Erdmann), 1890, A., 377.
Hydroxy*di*bromobenzylidenephenylhydrazine (Rössing), 1885, A., 389.
α-**Hydroxybromocarmine** (Will and Leymann), 1886, A., 252.
Hydroxybromophenylpyrazoline. See 1-Phenyl-3-pyrazolone, 4-bromo-.

β-**Hydroxybutaldehyde**, formation of, from acetaldehyde (Michael and Kopp), 1884, A., 420.

Hydroxybutanedisulphonic acid (Haubner), 1892, A., 424.

Hydroxybutane-β-sulphonic acid, sodium salt of (Haubner), 1892, A., 424.

γ-**Hydroxy*iso*butanesulphonic acid**, barium salt of (Guareschi and Garzino), 1888, A., 436.

o-**Hydroxy-*p*-*iso*butylbenzoic acid** (v. Dobrzycki), 1888, A., 368.

Hydroxy*iso*butylphosphinic acid (Fossek), 1885, A., 504.

β-**Hydroxybutylpiperidine** (*α-pipecolylethylalkine*) (Matzdorff), 1890, A., 1436.

Hydroxybutylpyridine (*α-propylpyridylalkine*) (Engler and Majmon), 1891, A., 1505.

β-**Hydroxybutylpyridine** (*α-picolylethylalkine*) (Matzdorff), 1890, A., 1436.

Hydroxy*iso*butylpyrotartaric acid, salts of (Fittig and Schneegans), 1890, A., 591.

Hydroxy*iso*butylpyrotartaric acids, α- and β-, salts of (Fittig and Feist), 1890, A., 592, 593.

Hydroxy*iso*butyramide, *tetra*chloro-, formation of (Levy, Witte and Curchod), 1890, A., 234.

Hydroxy*iso*butyramidine hydrochloride (Pinner), 1884, A., 1292.

α-**Hydroxybutyric acid**, β-amido- (Melikoff), 1884, A., 1301.
  p-bromo- (Kolbe), 1883, A., 574; (Melikoff), 1885, A., 650.
  β-chloro- (Melikoff), 1883, A., 311; (Melikoff and Petrenko-Kritschenko), 1892, A., 296.

β-**Hydroxybutyric acid**, lævorotatory, in the blood of a diabetic patient (Hugounenq), 1887, A., 986.
  in the urine in cases of *Diabetes mellitus* (Minkowski), 1885, A., 413.
  in diabetic urine (Külz), 1885, A., 285; 1887, A., 290; (Deichmüller, Szymanski and Tollens), 1885, A., 830; (Stadelmann), 1887, A., 464; (Wolpe), 1887, A., 857.

β-**Hydroxybutyric acid**, α-chloro- (Melikoff), 1883, A., 969; 1884, A., 1301; 1885, A., 650; 1887, A., 30; (Melikoff and Petrenko-Kritschenko), 1892, A., 296.
  γ-*tri*chloro- (v. Garzarolli-Thurnlackh), 1892, A., 429.

γ-**Hydroxybutyric acid** (Frühling), 1883, A., 42.
  transformation of, into its lactone (Henry), 1892, A., 1303.

Hydroxy*iso*butyric acid, conversion of acetonechloroform into (Willgerodt), 1883, A., 177.
  amido- (Melikoff), 1885, A., 650.
  p-bromo- (Kolbe), 1883, A., 573; (Melikoff), 1885, A., 650.
  chloro- (Melikoff), 1884, A., 1301; 1885, A., 650.
    distillation of, with water (Melikoff and Petrenko-Kritschenko), 1890, A., 736.
  *tetra*chloro- (Levy, Witte and Curchod), 1890, A., 234.

Hydroxy*iso*butyrimido-ether hydrochloride (Pinner), 1884, A., 1292.

Hydroxybutyro-*o*-toluido-*o*-tolylcarbamine, α-chloro- (Rügheimer and Schramm), 1888, A., 503.

Hydroxycaffeine, and its salts (Fischer), 1883, A., 355.

Hydroxycamphocarboxylic acid from camphocarboxylic acid (Haller and Minguin), 1890, A., 638.

Hydroxycampholactonic acid (Woringer), 1885, A., 669.

Hydroxycamphor. See Campholenic acid.

Hydroxycamphoronic acids (Kachler and Spitzer), 1883, A., 1008; 1889, A., 158.

Hydroxycarbamidophenol (Kalckhoff), 1883, A., 1110.

Hydroxycarbimidophenol (Bender), 1887, A., 245.

Hydroxycarbon compounds, action of non-metallic nitrides and hydronitrides on (Vidal), 1892, A., 1311.

3′-**Hydroxycarbostyril** (Friedländer and Weinberg), 1883, A., 351.

4′-**Hydroxycarbostyril** (v. Baeyer and Bloem), 1883, A., 197.
  3′-nitroso- (*quinisatoxime*) (v. Baeyer and Homolka), 1884, A., 1029.

α-**Hydroxy-*o*-carboxycinnamic lactone** (Bamberger and Kitschelt), 1892, A., 857.

Hydroxycarboxylic acids, aromatic, anhydrides of (Schiff), 1883, A., 335.

Hydroxycarboxymethylquinoxalineureide (Hinsberg), 1885, A., 909.

Hydroxycarboxytolylglyoxylic acid, *di*bromo- (*dibromohydroxymethylbenzoyldicarboxylic acid*) (Will and Leymann), 1886, A., 253.

Hydroxycellulose, formation of, electrochemically (Goppelsroeder), 1885, A., 208.

Hydroxy*hexa*chloropentenecarboxylic acid (Zincke and Küster), 1888, A., 1277.
α-**Hydroxycinchomeronic acid** (*2-hydroxypyridine-3:4-dicarboxylic acid*) (Weidel and Strache), 1886, A., 951.
Hydroxycinchonic acid (*2′-hydroxyquinoline-4′-carboxylic acid*) (Koenigs and Körner), 1884, A., 84.
α-**Hydroxycinchonine** and its derivatives (Jungfleisch and Léger), 1888, A., 380, 507; 1889, A., 906.
β-**Hydroxycinchonine** (Jungfleisch and Léger), 1888, A., 380, 507.
Hydroxycinnamic acid. See Coumaric acid.
Hydroxycinnoline and its derivatives (v. Richter), 1883, A., 1105; (Busch and Klett), 1892, A., 1494.
Hydroxycitraconic acid and its derivatives (Scherks), 1885, A., 513; (Melikoff and Feldmann), 1890, A., 29.
Hydroxycitric acid (v. Lippmann), 1883, A., 913.
  sodioferrous salt of (Rother), 1883, A., 458.
Hydroxycitronic acid (v. Lippmann), 1884, A., 939.
Hydroxycocaylacetic acid (Einhorn), 1889, A., 169.
Hydroxycomazine, and its derivatives (Krippendorff), 1885, A., 1243.
Hydroxycomenamic acid. See 3:4:5-Trihydroxypicolinic acid.
Hydroxy-compounds, action of aluminium chloride on (Claus and Mercklin), 1886, A., 143.
  action of sulphur on the salts of aromatic (Lange), 1888, A., 375.
Hydroxyconiine, *tri*bromo- (v. Hofmann), 1885, A., 563.
Hydroxy-*m*-coumaric acid and its derivatives (Ludwig), 1885, A., 664.
m-**Hydroxycoumarilic acid** (Hantzsch), 1887, A., 262.
m-**Hydroxycoumarin** (v. Pechmann and Welsh), 1884, A., 1346; (Bizzarri), 1885, A., 901.
Hydroxycroconic acid. See Leuconic acid.
Hydroxycumidine, and the action of acetic anhydride on (Liebermann and v. Kostanecki), 1884, A., 1147.
Hydroxycumylacrylic acids, *o*- and *m*- (Widman), 1886, A., 466, 467.
Hydroxycyanamylamine (Tröger), 1888, A., 802.
Hydroxycyanoconiine (v. Meyer), 1883, A., 352.
  behaviour of, with bromine and potassium hydroxide (v. Meyer), 1883, A., 354.
  derivatives of (v. Meyer), 1883, A., 352; (Riess), 1885, A., 235.
Hydroxycyanuric *di*sulphide (Klason), 1886, A., 325.
Hydroxycymene, bromo- (Mazzara), 1886, A., 1017.
γ-**Hydroxydecylic acid** (Schneegans), 1885, A., 650.
Hydroxydehydracetic acid and its acetyl-compound (Perkin and Bernhart), 1884, A., 1121; (Perkin), 1887, T., 491, 492.
Hydroxydeoxybenzoin (Ney), 1888, A., 1197.
Hydroxy-*m*-diazines (v. Meyer), 1890, A., 68.
Hydroxydiethylallylamine, chloro- (Reboul), 1884, A., 578.
6-**Hydroxy-2:4-diethyl-*m*-diazine-5-carboxylic acid** (v. Meyer), 1889, A., 686.
Hydroxydifurfurylcyanidine (Pinner), 1892, A., 1008.
Hydroxydihydropyridinecarboxylic acid, aldehyde of (Ost), 1883, A., 793.
2′-**Hydroxydihydroquinoline.** See Hydrocarbostyril.
Hydroxydihydroquinolone (Erlenmeyer and Lipp), 1883, A., 993.
Hydroxydihydroquinoxaline (Plöchl), 1886, A., 351.
Hydroxydiketodihydropentene, *tri*bromo- (Nef), 1890, A., 1272.
Hydroxydiketohexene, *penta*bromo- (Zincke and Kegel), 1890, A., 1109.
Hydroxydiketohydrindocarboxylic acid, *di*chloro- (Zincke), 1888, A., 489.
Hydroxydiketopentamethylenecarboxylic acid, *mono*- and *di*-chloro- (Hantzsch), 1890, A., 131, 132.
  *tri*chloro- (Hantzsch), 1888, A., 1190; (Landolt), 1892, A., 835.
  *tetra*chloro- (Landolt), 1892, A., 836.
4′-**Hydroxydimethylamido-*α*-naphthaquinone** (Mylius), 1885, A., 803.
Hydroxydimethylamidoquinone (Kehrmann), 1890, A., 757.
Hydroxy-2:3-dimethylbenzoic acid (Jacobsen), 1887, A., 36.
2-**Hydroxy-3:5-dimethylbenzoic acid** (*hydroxyxylic acid*) (Gunter), 1884, A., 1347.

2-**Hydroxy-4:6-dimethylbenzoic acid** (Jacobsen), 1886, A., 709.
Hydroxydimethylbutyrolactonecarboxylic acid (Zelinsky), 1892, A., 436.
6-**Hydroxy-2:4-dimethyl-*m*-diazine** (Pinner), 1886, A., 46; 1889, A., 1006.
4-**Hydroxy-2:6-dimethyl-*m*-diazine,** 5-bromo-, hydrobromide of (Pinner), 1887, A., 1054.
β-**Hydroxydimethylethylamine** (Knorr), 1889, A., 905.
6-**Hydroxy-2:5-dimethyl-4-ethyl-*m*-diazine** (v. Meyer), 1890, A., 69.
6-**Hydroxy-4:5-dimethyl-2-ethyl-*m*-diazine** (Pinner), 1889, A., 1007.
β-**Hydroxy-*α*-dimethyl*iso*hexoic acid** (Wohlbrück), 1887, A., 1099.
Hydroxydimethyliodoheptamethylene (Kipping and Perkin), 1891, T., 224.
β-**Hydroxydimethylnaphthaquinolinesulphonic acid** (Reed), 1887, A., 681.
Hydroxydimethylpurin (Fischer), 1884, A., 997.
1-**Hydroxy-2:5-dimethylpyrroline-3-carboxylic acid** (Knorr), 1887, A., 275.
4′-**Hydroxy-2:2′-dimethylquinazoline** (Niementowski), 1888, A., 837.
Hydroxy-2′:3′-dimethylquinoline [m.p. 44°] (Beyer), 1886, A., 630.
1-**Hydroxy-2′:4′-dimethylquinoline** (Engler and Bauer), 1889, A., 524.
3-**Hydroxy-2′:4′-dimethylquinoline** (Engler and Bauer), 1889, A., 525.
4′-**Hydroxy-1′:2′-dimethylquinoline.** See 4′-Oxy-1′:2′-dimethylquinoline.
4-**Hydroxy-1:3-dimethylquinoline** (Nölting and Trautmann), 1891, A., 328; 1892, A., 729.
4′-**Hydroxy-2′:3′-dimethylquinoline** (Conrad and Limpach), 1892, A., 78.
Hydroxydimethylquinoxaline (Hinsberg), 1884, A., 1053; 1889, A., 280; 1892, A., 1359.
  *di*bromo- (Nastvogel), 1889, A., 238.
Hydroxydimethylsulphonebenzide (*dihydroxyditolylsulphone*) (Tassinari), 1889, A., 246.
p-**Hydroxydiphenyl** and its derivatives (Kaiser), 1890, A., 898.
  synthesis of, from aniline (Hirsch), 1891, A., 437.
Hydroxydiphenyl, *di*amido- (Weinberg), 1888, A., 285; (Griess and Duisberg), 1890, A., 59.
Hydroxydiphenyl bases (Weinberg), 1888, A., 285.
Hydroxydiphenyl triketone (Söderbaum), 1891, A., 1043.
Hydroxydiphenylamine, *di*nitro- [m.p. 190°] (Nietzki and Schündelen), 1892, A., 310.
  thio- (Bernthsen), 1885, A., 260; 1886, A., 55.
o-**Hydroxydiphenylamine,** *di*nitro- (Schöpff), 1889, A., 772.
m-**Hydroxydiphenylamine** and its derivatives (Calm), 1884, A., 591.
  p-amido and *p*-nitroso- (Kohler), 1888, A., 587.
p-**Hydroxydiphenylamine** and its derivatives (Calm), 1884, A., 592; (Philip and Calm), 1885, A., 155.
Hydroxydiphenylbenzyl-maleide and -maleimidine, nitro- (Cohn), 1892, A., 485, 486.
γ-**Hydroxy-*γ*-diphenylbutyric acid** (Auger), 1888, A., 952.
o-**Hydroxydiphenylcarbamide** (Leuckart), 1890, A., 761.
Hydroxydiphenylcyanidine (Pinner), 1890, A., 497.
6-**Hydroxy-2:4-diphenyl-*m*-diazine,** formation of (Pinner), 1889, A., 1008; (Schwarze), 1890, A., 1159.
6-**Hydroxy-2:4-diphenyl-*m*-diazine-5-carboxylic acid** (v. Meyer), 1890, A., 68.
4′-**Hydroxydiphenyl-2:2′-disulphonic acid,** 4-amido- (Limpricht), 1891, A., 929.
Hydroxydiphenylene ketone, and its derivatives (Richter), 1884, A., 325.
Hydroxydiphenylethane (Koenigs), 1891, A., 208; (Koenigs and Carl), 1892, A., 466.
Hydroxydiphenylethylamine and its derivatives (Goldschmidt and Polonowska), 1887, A., 492; (Zanetti), 1891, A., 726.
Hydroxydiphenylmethane-di- and -tricarboxylic acids (Juillard), 1888, A., 707.
6-**Hydroxy-2:4-diphenyl-5-methyl-*m*-diazine** (v. Meyer), 1889, A., 578; 1890, A., 68.
  formation of (Schwarze), 1890, A., 1159.
m-**Hydroxydiphenylnitrosamine** (Kohler), 1888, A., 587.
Hydroxydiphenylpropionic acid (Liebermann and Hartmann), 1891, A., 1484.
Hydroxydiphenylpropylenediamine (Fauconnier), 1888, A., 1281.
p-**Hydroxydiphenylquinoxaline** (Autenrieth and Hinsberg), 1892, A., 733.

3-**Hydroxydiphenyl-6-sulphonic acid**, 4:4′-*di*amido- (Weinberg), 1888, A., 285.
Hydroxydiphthalyl (Graebe and Guye), 1886, A., 882.
Hydroxydipropylamine platinochloride (Liebermann and Paal), 1883, A., 910.
Hydroxydiquinolyl (Weidel and Gläser), 1886, A., 949; (Weidel), 1887, A., 848.
1-**Hydroxy-4:2′-disulpho-β-naphthoic acid** (König), 1889, A., 719.
Hydroxyditolylcyanidine (Pinner), 1892, A., 1008.
2′-**Hydroxy-5:5′-ditolyl-4:4′-disulphonic acid**, 2-amido- (Helle), 1892, A., 1468.
Hydroxydixanthones (v. Kostanecki and Nessler), 1892, A., 504; (v. Kostanecki and Seidmann), 1892, A., 1097.
Hydroxydurylic acid (Jacobsen and Schnapauff), 1886, A., 68.
Hydroxy-β-*iso*durylic acid (Krohn), 1888, A., 594.
Hydroxyethanedisulphonic acid, salts of (Monari), 1885, A., 970.
Hydroxyethanesulphonic acid. See Isethionic acid.
Hydroxyethenylamylacetic acid (Poetsch), 1883, A., 730.
Hydroxyethoxyanthraquinone (Liebermann and Jellinek), 1888, A., 716.
Hydroxyethoxydiphenylamine, *di*nitro- (Nietzki and Kaufmann), 1892, A., 314.
Hydroxyethoxymethylquinoxaline (Autenrieth and Hinsberg), 1892, A., 733.
6-**Hydroxy-2-*p*-ethoxyphenyl-5-benzyl-4-methyl-*m*-diazine** (Pinner), 1891, A., 64.
6-**Hydroxy-2-*p*-ethoxyphenyl-*m*-diazine-4-carboxylic acid** (Pinner), 1891, A., 64.
6-**Hydroxy-2-*o*- and -*p*-ethoxyphenyl-4-methyl-*m*-diazines** (Pinner), 1891, A., 64.
6-**Hydroxy-2-*p*-ethoxyphenyl-4-phenyl-*m*-diazine** (Pinner), 1891, A., 64.
Hydroxyethoxypyridine [m.p. 128°] (Weidel and Blau), 1886, A., 76.
2-**Hydroxyethoxypyridine**, *di*chloro-4-amido- (Stokes and v. Pechmann), 1887 A., 157.
1-**Hydroxy-1 -ethoxyquinoline**, 2:4-*di*chloro- (Hebebrand), 1889, A., 61.
4′-**Hydroxy-2′-ethoxyquinoline** (Bischoff), 1889, A., 519.
Hydroxyethylacetamide picrate (Gabriel), 1889, A., 1134.
Hydroxyethyl-*o*-amidophenol (Knorr), 1889, A., 1219.
Hydroxyethylamine (*amidoethylic alcohol*) nitrate (Gabriel), 1888, A., 1268.
salts (Gabriel), 1888, A., 440.
Hydroxyethylaniline, preparation of (Knorr), 1889, A., 1219; (Otto), 1891, A., 1373.
Hydroxyethyl-*o*-anisidine (Knorr), 1889, A., 1219.
Hydroxyethylbenzamide (Gabriel), 1889, A., 1134.
Hydroxyethylbenzoic acid (*phlorolcarboxylic acid*) (Oliveri), 1884, A., 174.
o-chloronitro-, lactone of (Zincke and Latten), 1892, A., 1230.
γ-**Hydroxy-α-ethylbutyric acid** and its salts (Chanlaroff), 1885, A., 375.
Hydroxyethyl-*m*-diazine-2-carboxylic acid (Pinner), 1892, A., 1008.
1-**Hydroxy-1′-ethylenehydroquinoline** (Kohn), 1886, T., 508.
Hydroxyethylethylaniline (*phenyldiethylalkine*) (Laun), 1884, A., 1011.
5-**Hydroxyethyl-2-ethylpiperidine** (2:5-*methylethylpiperidylalkine*) (Prausnitz), 1892, A., 1358.
2-**Hydroxyethyl-5-ethylpyridine** (*methylethylpyridylalkine*) (Prausnitz), 1890, A., 1436.
δ-**Hydroxyethylhexoic acid**, salts of (Fittig and Christ), 1892, A., 962.
Hydroxyethylhydroxyquinoline and salts of (Wurtz), 1883, A., 923.
Hydroxyethylic sodium thiosulphate (Purgotti), 1892, A., 1418.
Hydroxyethylidene-2′-methyl-β-naphthaquinoline, *tri*chloro- (Seitz), 1889, A., 527.
Hydroxyethylmethylamine (Knorr), 1889, A., 1218.
Hydroxyethylmethylaniline (*phenylmethylethylalkine*) and its derivatives (Laun), 1884, A., 1011.
Hydroxyethylmethyl-*o*-anisidine (Knorr), 1889, A., 1220.
2-**Hydroxyethyl-1-methylpiperidine** (*methyl-α-pipecolylalkine*) and its derivatives (Ladenburg), 1890, A., 68; 1891, A., 1093; (Lipp), 1892, A., 1245.
2-**Hydroxyethyl-1-methyltetrahydropyridine** (Lipp), 1892, A., 1244.
Hydroxyethylnaphthylamines (Otto), 1891, A., 1374.
Hydroxyethylphosphinic acid (Fossek), 1886, A., 530.

Hydroxyethyl-phthalamic acid and -phthalimide (Gabriel), 1888, A., 440.
2-**Hydroxyethylpiperidine** (Ladenburg), 1890, A., 67; 1891, A., 1093.
ω-**Hydroxyethylpiperonylcarboxylic acid** (Perkin), 1890, T., 996, 1020.
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  salts of (Perkin), 1890, T., 1023.
  bromo- (Perkin), 1890, T., 1025.
ω-**Hydroxyethylpiperonylcarboxylic anhydride** (Perkin), 1890, T., 1021.
  bromo- and nitro- (Perkin), 1890, T., 1025, 1027.
Hydroxyethylpropylamine and its platinochloride (Liebermann and Paal), 1883, A., 910.
Hydroxyethylpropylaniline (Laun), 1884, A., 1011.
2-**Hydroxyethylpyridine** (*α-picolylalkine*) and derivatives of (Ladenburg), 1890, A., 67; 1891, A., 1092.
ω-**Hydroxyethylpyrocatecholcarboxylic anhydride** (Perkin), 1890, T., 1027.
4-**Hydroxy-3′-ethylquinoline**, 2′-chloro- (Rügheimer and Schramm), 1887, A., 738.
1-**Hydroxy-1′-ethyltetrahydroquinoline** (Fischer), 1883, A., 1146; (Fischer and Renouf), 1884, A., 1049.
  ethiodide (Kohn), 1886, T., 505.
4-**Hydroxy-1′-ethyltetrahydroquinoline** (Riemerschmied), 1883, A., 1148.
Hydroxyethyltheobromine (Fischer), 1883, A., 357.
Hydroxyethyltrihydroquinolinecarboxylic acid (Lippmann and Fleissner), 1887, A., 1120.
Hydroxyethyltrimethylammonium platinochloride (Bode), 1892, A., 807.
Hydroxyethyltrimethylenecarboxylic acid (Marshall and Perkin), 1891, T., 870.
γ-**Hydroxyethylvaleric acid** (Young), 1883, T., 177.
Hydroxyethylxanthine (Lehmann), 1890, A., 32.
Hydroxy-ψ-flavenol (Weidel and Bamberger), 1888, A., 966.
Hydroxyfluorenecarboxylic acid (Graebe and Aubin), 1889, A., 146.
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Hydroxygluconic acid (Boutroux), 1890, A., 1399.
α-**Hydroxyglutaric acid** (Wolff), 1891, A., 421.
β-**Hydroxyglutaric acid** (v. Pechmann and Jenisch), 1892, A., 147.
α-**Hydroxy-β-halogen lactic acids**, distillation of, with water (Melikoff and Petrenko-Kritschenko), 1890, A., 736.
Hydroxyheptoic acid (Fittig and Schmidt), 1890, A., 589.
  salts of (Young), 1883, A., 455.
Hydroxy*iso*heptoic acid (Fittig and Zanner), 1890, A., 590.
Hydroxyheptylphosphinic acid (Fossek), 1886, A., 529.
β-**Hydroxyheptylsuccinic acid** (*hexitamalic acid*) and its salts (Schneegans), 1885, A., 650.
Hydroxyhexanedisulphonic acid, barium salt of (Ludwig), 1889, A., 121.
Hydroxyhexic acid. See Propylsuccinic acid.
Hydroxy*iso*hexic acid. See *iso*Propyltartaric acid.
γ-**Hydroxyhexoamide** (Fittig and Dubois), 1890, A., 880.
Hydroxyhexoic acid (Hantzsch and Wohlbrück), 1887, A., 717.
γ-**Hydroxyhexoic acid**, ammonium salt of (Fittig and Dubois), 1890, A., 880.
  lactone of, conversion of gluconic acid into (Kiliani and Kleemann), 1884, A., 730, 993.
    action of sodium ethylate on (Fittig), 1885, A., 375; (Fittig and Dubois), 1890, A., 868.
γ-**Hydroxy*iso*hexoic acid**, lactone of, action of sodium ethylate on (Erdmann), 1885, A., 963.
    action of water and of hydriodic acid on (Fittig and Rühlmann), 1885, A., 375.
δ-**Hydroxyhexoic acid**, α- and β-lactones of (Gottstein), 1883, A., 454.
Hydroxyhydrastinine and its derivatives (Freund and Will), 1887, A., 1057.
α-**Hydroxyhydrindenecarboxylamide**, *tetra*chloro- (Zincke and Arnst), 1892, A., 858.
Hydroxyhydrocarbostyril (*2′:4′-dihydroxy-3′:4′-dihydroquinoline*) (Einhorn), 1884, A., 1338.
  3-chloro- (Eichengrün and Einhorn), 1890, A., 1128; 1891, A., 1100.
Hydroxyhydro-*p*-coumaric acid (Blendermann), 1883, A., 818.
Hydroxyhydrocyanomesitenelactone (Obrégia), 1892, A., 325.
Hydroxyhydro*iso*dehydracetic acid, nitrile of (Obrégia), 1892, A., 325.
Hydroxyhydrodiphthalylic acid (Wislicenus), 1885, A., 57.

Hydroxyhydrolapachol (Hooker), 1892, T., 628.

Hydroxyhydromuconic acid, lactone of (Ruhemann), 1890, T., 942.
  bromo-, lactone of (Ruhemann and Dufton), 1891, T., 753.

1-Hydroxyhydroquinoline (Skraup), 1883, A., 93.

2-Hydroxyhydroquinoline (Skraup), 1883, A., 96; (Riemerschmied), 1883, A., 1148.

3-Hydroxyhydroquinoline (Skraup), 1883, A., 94.

Hydroxyhydroquinoxalines (Hinsberg), 1889, A., 280.

Hydroxyimidomethyluracil (Jaeger), 1891, A., 1007.

Hydroxyimido-methyl- and -phenyl-*syn*oxazolones (Nussberger), 1892, A., 1175, 1177.

Hydroxyindazine (Witt, Nölting and Grandmougin), 1891, A., 312.

Hydroxyindenecarboxylic acid (*hydrindonecarboxylic acid*) (Zincke), 1887, A., 728.

Hydroxyindone, bromo- (Roser and Haselhoff), 1888, A., 1304; (Meldola and Hughes), 1890, T., 400.
  benzylamide, hydrazone, hydrazone-hydrazide, and β-naphthylamide of (Meldola and Hughes), 1890, T., 403.

Hydroxyketohydrindenecarboxylamide, *di*chloro- (Zincke and Arnst), 1892, A., 858.

Hydroxyketohydrindenecarboxylic acid, *di*bromo-, *di*chloro-, and chlorobromo- (Zincke and Gerland), 1888, A., 1199, 1198.

Hydroxyketoindene, chloro- and bromo- (Zincke and Gerland), 1888, A., 1199, 1200.

γ_1-**Hydroxy-**α_1**-ketojuloline** and β_1-nitroso- (Kayser and Reissert), 1892, A., 884.

Hydroxyketone-dyes (Graebe and Eichengrün), 1891, A., 706; 1892, A., 1224.

Hydroxyketones, aromatic (Crépieux), 1892, A., 62.
  behaviour of, with sulphuric acid and with ammonia (Graebe and Eichengrün), 1892, A., 1226.
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Hydroxyl group, influence of certain groups on the thermochemical value of, in the aromatic series (Alexéeff and Werner), 1890, A., 439.

Hydroxyl group, reagent for (Landwehr), 1887, A., 124; (Hinsberg), 1891, A., 49.
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  formation of, from nitric acid (Divers), 1883, T., 443.
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  formation of, by the action of potassium nitrite on hyposulphurous acid (Lidoff), 1885, A., 722.
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  thermochemistry of (Berthelot and André), 1890, A., 934; (Thomsen), 1892, A., 1143.
  actions of (Nägeli), 1883, A., 728; (Fischer), 1889, A., 1163.
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  action of, on animals (Gibbs and Reichert), 1891, A., 1393.
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- **Hydroxylamine**, poisonous action of (Loew), 1885, A., 830.
  - compounds of, with metallic chlorides (Crismer), 1890, A., 558.
  - derivatives, organic (Schramm), 1884, A., 51.
    - isomeric monosubstituted (Beckmann), 1889, A., 607; (Auwers and Meyer), 1889, A., 609.
    - so-called physically isomeric (Lossen), 1892, A., 711.
    - stereochemical isomerism of (Behrend and König), 1891, A., 1032.
    - structure of (Lossen), 1884, A., 1324; 1885, A., 895.
  - alkyl-derivatives of (Behrend), 1889, A., 979; (Kothe), 1892, A., 316; (Behrend and König), 1892, A., 1456.
  - benzyl-derivatives of (Walder), 1886, A., 796; 1887, A., 246, 813; (Behrend and Leuchs), 1889, A., 500, 703.
  - titration of, by iodine, effects of dilution and the presence of sodium salts and carbonic anhydride on (Haga), 1887, T., 794.
- **Hydroxylamine** salts, action of, on plants (Meyer and Schulze), 1884, A., 1210.
  - hydrochloride, preparation of (Meyer), 1883, A., 646; (Eichkoff), 1890, A., 558.
    - use of, in quantitative analysis (Lainer), 1888, A., 1343.
    - estimation of hydrogen chloride in solutions of (Muller), 1891, A., 107.
  - platinum bases (Alexander), 1888, A., 425.
  - thiocarbimide (v. der Kall), 1891, A., 1222.
  - amido-derivatives of, constitution of (Minunni), 1891, A., 697.
- **Hydroxylaminedisulphonic acid**, preparation of the alkali salts of (Raschig), 1888, A., 913.
- **Hydroxylaminesulphonates** and their conversion into hyponitrites (Divers and Haga), 1889, T., 760; P., 146.
- **Hydroxy-β-lapachone** (Hooker), 1891, A., 1240; 1892, T., 649.
- **Hydroxylation** by direct oxidation (Meyer), 1883, A., 983, 1072.
- **Hydroxylepidine.** See Hydroxy-4′-methylquinoline.
- **Hydroxylevulinic acids**, *α*- and *β*- (Wolff), 1891, A., 1187, 1185.
- **Hydro-xyloquinone.** See Xyloquinol.
- **Hydroxylutidinecarboxylic acid**, ethylic salt of (Collie), 1885, A., 374.
- **Hydroxymaleic acid** (Scherks), 1884, A., 993; 1885, A., 513.
- **Hydroxymalonic acid.** See Tartronic acid.
- *o*-**Hydroxymandelic acid** (v. Baeyer and Fritsch), 1884, A., 1022.
- **Hydroxymellitic acid** (*hydrotrimellic acid*) and its salts (Jacobsen and Meyer), 1883, A., 590.
- **Hydroxymesitenedicarboxylic acid** (Hantzsch), 1883, A., 1083.
- **Hydroxymethanesulphonic acid**, sodium salt of (Kraut, Eschweiler and Grossmann), 1890, A., 1092.
- **Hydroxymethenylamidophenol** (Sandmeyer), 1887, A., 135; (Bender), 1887, A., 245.
- **Hydroxymethenyltolylenediamine** (Sandmeyer), 1887, A., 135.
- *o*-**Hydroxy**-*p*-**methoxyacetophenone** (Nagai), 1892, A., 59.
- 2-**Hydroxy-4-methoxyallylbenzene** (v. Pechmann and Cohen), 1884, A., 1331.
- *p*-**Hydroxy**-*o*-**methoxybenzaldehydephenylhydrazone** (Marcus), 1892, A., 317.
- 1-**Hydroxy-3-methoxybenzene**, 4-amido- (Bechhold), 1889, A., 1155.
- *p*-**Hydroxy**-*m*-**methoxybenzoylformic acid** (*hydroxymethoxyphenylglyoxylic acid; vanilloyl acid*) (Tiemann), 1892, A., 64.
- *m*-**Hydroxy**-*o*-**methoxycinnamic acid** (Schnell), 1884, A., 1165; 1887, A., 140.
- 4′-**Hydroxy-1- and -3-methoxy-2′-methylquinolines** (Conrad and Limpach), 1888, A., 854, 853.
- **Hydroxymethoxyquinoline** (La Coste and Valeur), 1887, A., 973.
- 2′-**Hydroxy-3-methoxyquinoline** (*methoxycarbostyril*) (Eichengrün and Einhorn), 1891, A., 1101.
- **Hydroxymethoxytoluene** (*hydroxytolyl methyl ether*) (Limpach), 1889, A., 499.
- **Hydroxymethylbenzene pentaketone** (Kehrmann), 1888, A., 940.
- **Hydroxy-β-methyl-γ-acetoxime-δ-*iso*-nitrosoamidovaleric acid**, lactam of (Obrégia), 1892, A., 326.
- **Hydroxymethylacridine** (Besthorn and Curtman), 1891, A., 1233.
- **Hydroxymethylanthraquinone**, and its acetyl-derivative (Roemer and Link), 1883, A., 1139.
- **Hydroxymethylanthraquinones**, spectra of (Liebermann and v. Kostanecki), 1887, A., 1.

m-**Hydroxymethylbenzaldehyde** (Tiemann and Ludwig), 1883, A., 189.
  nitro-derivatives of, and their constitution (Tiemann and Ludwig), 1883, A., 189.
  α- and β-nitro- (Tiemann and Ludwig), 1883, A., 586.
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Hydroxymethylbenzoyldicarboxylic acid, *di*bromo- (*dibromohydroxycarboxytolylglyoxylic acid*) (Will and Leymann), 1886, A., 253.
3′-**Hydroxymethyl-4′-*di*bromomethylquinoxaline** (Nastvogel), 1889, A., 238.
Hydroxy-α-methylbutyric acids, α- and β-. See Hydroxyvaleric acids.
4′-**Hydroxy-1-methylcarbostyril**, 3′-chloro- (*chlorhydroxy-o-tolucarbostyril*) (Rügheimer and Hoffmann), 1886, A., 160.
6:4-**Hydroxymethylcinnamic acid**, anhydride of (v. Pechmann and Welsh), 1884, A., 1346.
Hydroxymethyl-coniferin and -coniferyl alcohol (Körner), 1889, A., 159.
Hydroxy-β-methylcoumarilic acid, bromo- (v. Pechmann and Cohen), 1884, A., 1332.
Hydroxymethylcoumarone (Hantzsch), 1887, A., 262.
Hydroxy-β-methyl-γ-cyanacetylbutyronitrile (Obrégia), 1892, A., 325.
4-**Hydroxy-6-methyl-*m*-diazine-2-carboxylic acid** (Pinner), 1892, A., 1008.
6-**Hydroxy-4-methyl-2:5-diethyl-*m*-diazine** (Pinner), 1889, A., 1007.
6-**Hydroxy-5-methyl-2:4-diethyl-*m*-diazine** (v. Meyer), 1889, A., 577, 685.
  oxime of (v. Meyer), 1889, A., 685.
Hydroxy-4′-methyldihydroquinoline (Knorr and Klotz), 1887, A., 278.
Hydroxymethyldihydroquinoxaline (Plöchl), 1886, A., 351; (Leuckart and Hermann), 1887, A., 383.
Hydroxymethyldiphenyl, *di*amido- (Weinberg), 1888, A., 285.
Hydroxymethyleneacetone, stereoisomerism of (Claisen), 1892, A., 1073.
Hydroxymethylenediphenyl triketone (Söderbaum), 1891, A., 1043.
Hydroxymethylenequinolinium base (Claus, Howitz, Massan and Raps), 1892, A., 878.
4′-**Hydroxy-1-methyl-3′-ethylcarbostyril** (Rügheimer and Schramm), 1887, A., 738; 1888, A., 502.
6-**Hydroxy-4-methyl-2-ethyl-*m*-diazine** (Pinner), 1886, A., 46; 1889, A., 1007.
4-**Hydroxy-6-methyl-2-ethyl-*m*-diazine** 5-bromo- (Pinner) 1887, A., 1054.
4′-**Hydroxymethylethylquinoline** (Conrad and Limpach), 1892, A., 79.
4′-**Hydroxy-1-methyl-3′-ethylquinoline**, 2′-chloro- (Rügheimer and Schramm), 1887, A., 738.
Hydroxymethylglutaric acid from levulinic acid and the corresponding lactonic acid (Kreckeler and Tollens), 1885, A., 1202; (Block and Tollens), 1886, A., 533.
Hydroxymethylhydrohydrastinine methiodide, bromo- (Freund and Dormeyer), 1891, A., 1520.
2′-**Hydroxy-3′-methylhydroquinoline**, 2-amido-. See Methylhydrocarbostyril, 2-amido-.
6-**Hydroxy-4-methyl-2-hydroxy*iso*propyl-*m*-diazine** (Pinner), 1890, A., 70.
α_1-**Hydroxy-**γ_1**-methyljulolidine**, $\beta_1\beta_1\gamma_1$-*tri*bromo- (Reissert), 1892, A., 498.
α_1-**Hydroxy-**γ_1**-methyljuloline** (Reissert), 1892, A., 497.
  β_1-bromo- and $\beta_1\gamma_1$-*di*bromo- (Reissert), 1892, A., 497.
"**Hydroxymethylmalonic acid**" (Tanatar), 1891, A., 175.
4′-**Hydroxy-2′-methyl-α-** and **-β-naphthaquinolines** (*naphtha-γ-hydroxyquinaldines*) (Knorr), 1884, A., 1198; (Conrad and Limpach), 1888, A., 504.
4-**Hydroxy-2′-methylphenofurfuran-1′-carboxylic acid**, 1:2:3-*tri*-chloro- (Ikuta), 1892, A., 609.
4-**Hydroxymethyl-1-phenyl-3-methylpyrazolone** (Pellizzari), 1889, A., 518.
Hydroxy-α-methyl-phthalanil and **-phthalanilic acid** (Niementowski), 1892, A., 608.
Hydroxymethylphthalic anhydride, *di*bromo- (Will and Leymann), 1886, A., 253.
Hydroxymethylpurin (Fischer), 1884, A., 997.
  *di*chloro- (Fischer), 1884, A., 996.
4′-**Hydroxymethylpyridine**, and its derivatives (Lieben and Haitinger), 1884, A., 1196.
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Hydroxymethylpyrotartaric acid (*methylitamalic acid*), salts of (Fittig and Fränkel), 1890, A., 585.

4′-Hydroxy-2-methylquinazoline (Niementowski), 1889, A., 1065.

4′-Hydroxy-2′-methylquinazoline, nitro- and chloro- (Dehoff), 1890, A., 802.

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1-Hydroxy-2-methylquinoline (*hydroxytoluquinoline*) (Nölting and Trautmann), 1891, A., 326; 1892, A., 727.
  4-nitro- (Nölting and Trautmann), 1891, A., 326; 1892, A., 727.

1-Hydroxy-2′-methylquinoline (*o-hydroxyquinaldine*) and its derivatives (Doebner and v. Miller), 1884, A., 1374.

1-Hydroxy-4-methylquinoline (Nölting and Trautmann), 1891, A., 326; 1892, A., 727.
  2-amido- (Ganelin and v. Kostanecki), 1892, A., 506.

1-Hydroxy-4′-methylquinoline (*hydroxylepidine*) (Busch and Koenigs), 1890, A., 1435.

3-Hydroxy-1-methylquinoline (Herzfeld), 1884, A., 1199.

3-Hydroxy-2′-methylquinoline (*p-hydroxyquinaldine*) (Doebner and v. Miller), 1884, A., 1374.

3-Hydroxy-4′-methylquinoline (Koenigs), 1890, A., 1434; (Busch and Koenigs), 1890, A., 1435.

3-Hydroxy-4-methylquinoline, 1-nitro- (Nölting and Trautmann), 1891, A., 326.

4-Hydroxy-1-methylquinoline (Herzfeld), 1884, A., 1199.

4-Hydroxy-3-methylquinoline and nitroso- (Nölting and Trautmann), 1891, A., 326.

4′-Hydroxy-1-methylquinoline, 2′:3′-*di*chloro- (Rügheimer and Hoffmann), 1886, A., 160.

4′-Hydroxy-2′-methylquinoline (*hydroxyquinaldine*) (Conrad and Limpach), 1887, A., 679; 1888, A., 1109; (Knorr), 1887, A., 847.
  synthesis of homologues of (Conrad and Limpach), 1888, A., 503.
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2′-Hydroxy-4′-methyl*iso*quinoline, chloro- (Gabriel), 1887, A., 1112.

Hydroxymethylquinolines, 4:1:2-, 2:1:4- and 3:4:1-nitro- (Nölting and Trautmann), 1892, A., 727, 728, 729.

4′-Hydroxy-2′-methylquinoline-3′-carboxylic acid and aldehyde (Conrad and Limpach), 1888, A., 1109.

Hydroxy-2′-methylquinolineazobenzenesulphonic acid, sodium salt of (Conrad and Limpach), 1888, A., 1109.

1-Hydroxy-2′-methylquinolinecarboxylic acid (König), 1888, A., 610.

2′-Hydroxy-4′methylquinoline-1-carboxylic acid (Reissert), 1891, A., 737.

4′Hydroxy-2′-methylquinoline-3′-carboxylic acid (Conrad and Limpach), 1888, A., 1110.

2′-Hydroxymethylquinolinesulphonic acid (Feer and Koenigs), 1885, A., 1235.

4′-Hydroxy-2′-methylquinolinesulphonic acid (Conrad and Limpach), 1888, A., 1110.

Hydroxymethylquinoxaline (*hydroxytoluquinoxaline*) (Hinsberg), 1885, A., 910; 1886, A., 561.

Hydroxymethylquinoxalinecarboxylic acid (Hinsberg), 1885, A., 909; (Zehra), 1891, A., 304.

Hydroxymethylsuccinic acid, *tri*chloro-, and its salts (Fittig and Miller), 1890, A., 586.

Hydroxymethylsulphonebetaine (Claus and Posselt), 1890, A., 522.

5-Hydroxy-2-methylterephthalic acid (Jacobsen and Meyer), 1883, A., 590.

1-Hydroxy-1′-methyltetrahydroquinoline (*kairin*) (Fischer), 1883, A., 1146; (Fischer and Renouf), 1884, A., 1049.
  physiological properties of (Filehne), 1884, A., 474.
  benzyl chloride and methiodide of (Kohn), 1886, T., 501, 506.

1-Hydroxy-2′-methyltetrahydroquinoline and its derivatives (Doebner and v. Miller), 1884, A., 1374.

2-Hydroxy-4′-methyltetrahydroquinoline and its nitro-derivatives (Fischer and Wittmack), 1884, A., 1052.

1-Hydroxymethyltetrahydroquinolinecarboxylic acid (Schmitt and Engelmann), 1887 A., 738; (Królikowski and Nencki), 1888, A., 865.

Hydroxymethylthiazole (Tcherniac and Hellon), 1883, A., 654; (Tcherniac), 1892, A., 1425.

- **Hydroxymethylthiazolecarboxylic acid** (Zürcher), 1889, A., 725; (Wohmann) 1891, A., 226.
- **Hydroxymethylthiophen** (*hydroxythiotolen*) (Kues and Paal), 1886, A., 536.
- 1-**Hydroxymethyltrihydroquinolinecarboxylic acid**, behaviour of, in the organism (Królikowski and Nencki), 1888, A., 865.
- β-**Hydroxy**-α-**methylvaleric acid** (Hantzsch and Wohlbrück), 1887, A., 717.
- γ-**Hydroxy**-α-**methylvaleric acid** (Gottstein), 1883, A., 455.
- **Hydroxymethylxanthine** (Behrend), 1886, A., 338; (Lehmann), 1890, A., 32.
- β-**Hydroxymethylxanthone** (v. Kostanecki and Nessler), 1891, A., 1060.
- **Hydroxymyristic acid** (Hell and Twerdomedoff), 1889, A., 956.
- β-**Hydroxy**-α- and α-**hydroxy**-β-**naphthahydroxamic acids** (Jeanrenaud), 1889, A., 871.
- **Hydroxynaphthalide** (Graebe and Gfeller), 1892, A., 864.
- β-**Hydroxynaphthaquinoline** (Gentil), 1885, A., 561.
- **Hydroxynaphthaquinone**, *di*bromo- (Armstrong and Streatfeild), 1886, P., 232.
- 2′-**Hydroxy**-1:2-**naphthaquinone** (Clausius), 1890, A., 628.
- 2-**Hydroxy**-1:4-**naphthaquinone** (*naphthalic acid*), preparation of (Kowalski), 1892, A., 1098.
    - phenylhydrazine derivatives of (Zincke and Thelen), 1884, A., 1359; 1888, A., 1097.
    - 3-bromo- (Miller), 1885, A., 667.
    - 3-chloro- (Claus and Mueller), 1886, A., 247.
    - 3-bromo- and 3-chloro-, action of hypochlorous and hypobromous acids on (Zincke and Gerland), 1888, A., 1198.
    - *tri*chloro- (Claus), 1886, A., 714.
    - *tetra*chloro- (Claus and Wenzlick), 1886, A., 713; (Claus), 1886, A., 714.
    - 3-nitro-, derivatives of (Kehrmann and Weichardt), 1889, A., 1197.
- 4′-**Hydroxy**-1:4-**naphthaquinone** (*juglone; nucin; regianin*) (Bernthsen), 1884, A., 1365; (Bernthsen and Semper), 1885, A., 546; 1886, A., 363; 1887, A., 674; (Mylius), 1885, A., 803.
- 4′-**Hydroxy**-1:4-**naphthaquinone** (*juglone; nucin; regianin*), identity of, with regianin and nucin (Phipson), 1885, A. 1142.
    - synthesis of (Bernthsen and Semper), 1887, A., 674.
    - constitution of (Bernthsen and Semper), 1885, A., 548.
    - derivatives (Bernthsen and Semper), 1885, A., 546; (Mylius), 1885, A., 803.
- 2-**Hydroxy**-1:4-**naphthaquinoneanilide** and 3-chloro- (Zincke and Kegel), 1889, A., 267, 268.
- **Hydroxynaphthaquinonecarboxylic acid**, chloro- (Ekstrand), 1889, A., 153.
- 4′-**Hydroxy**-1:4-**naphthaquinonedioxime** (*juglonedioxime*) (Bernthsen and Semper), 1886, A., 364.
- 2-**Hydroxy**-1:4-**naphthaquinoneimide** (Kronfeld), 1884, A., 1037; (Meerson), 1888, A., 1200.
    - 3-bromo- (Zincke and Gerland), 1887, A., 838.
- 3-**Hydroxy**-1:4-**naphthaquinone**-4-**imide**, 2-chloro- (Zincke and Schmunk), 1890, A., 1147.
- 3-**Hydroxy**-1:4-**naphthaquinoneoxime** (v. Kostanecki), 1889, A., 887.
    - 2-chloro- (Zincke and Schmunk), 1890, A., 1147.
- 4′-**Hydroxy**-1:4-**naphthaquinoneoxime** (*jugloneoxime*) (Bernthsen and Semper), 1885, A., 547.
- 2′-**Hydroxy**-2:1-**naphthaquinoneoxime** (Clausius), 1890, A., 628.
- 2-**Hydroxy**-1:4-**naphthaquinonesulphonic acid**, 3-chloro- (Claus and van der Cloet), 1888, A., 603.
- **Hydroxynaphthaquinoxalinecarboxylic acid** (Kühling), 1891, A., 1342.
- **Hydroxynaphthatoluic acid** (Walder), 1883, A., 666.
- **Hydroxynaphtho***tri***chloride diethylic orthophosphate** (Wolffenstein), 1889, A., 615.
- 1′-**Hydroxy**-α-**naphthoic acid** (*naphtholcarboxylic acid*) (Ekstrand), 1886, A., 715.
    - chloro-, and nitro- (Ekstrand), 1889, A., 153.
- 2-**Hydroxy**-α-**naphthoic acid** [m.p. 157°] and derivatives (Nietzki and Guitermann), 1887, A., 732; (Schmitt and Burkard), 1888, A., 60.
    - action of phosphorus *penta*chloride on (Rabe), 1889, A., 514.

1-**Hydroxy-β-naphthoic acid** (Nietzki and Guitermann), 1887, A., 732; (Schmitt and Burkard), 1888, A., 59.
  constitution of (Wolffenstein), 1889, A., 615.
  action of phosphorus *penta*chloride on (Wolffenstein), 1887, A., 963; 1888, A., 714.
  4-amido-(Nietzki and Guitermann), 1887, A., 732; (Schmitt and Burkard), 1888, A., 59.
3-**Hydroxy-β-naphthoic acid** [m.p. 216°] (Schmitt and Burkard), 1888, A., 60.
  action of aniline on (Schöpff), 1892, A., 1476.
3-**Hydroxy-β-naphthoic anilide** (Schöpff), 1892, A., 1476.
3′-**Hydroxy-β-naphthoxanthone** (v. Kostanecki), 1892, A., 1099.
Hydroxynaphthoxanthones (Bener), 1892, A., 1100.
α-**Hydroxynaphthyl methyl ketone** (Witt), 1888, A., 486.
β-**Hydroxynaphthylacrylic acid and anhydride** (Kauffmann), 1883, A., 1136.
αβ-**Hydroxynaphthylbenzoic acid**, and its derivatives (Walder), 1883, A., 666.
6-**Hydroxy-2-β-naphthyl-*m*-diazine-4-carboxylic acid** (Pinner), 1892, A., 1008.
6-**Hydroxy-2-β-naphthyl-4:5-dimethyl-*m*-diazine** (Pinner), 1892, A., 1009.
Hydroxynaphthylic sulphide [m.p. 214°—215°] (Tassinari), 1887, A., 808.
β-**Hydroxynaphthylic *mono*- and -*di*-sulphides** (Onufrowicz), 1891, A., 320, 321.
6-**Hydroxy-2-β-naphthyl-4-methyl-*m*-diazine** (Pinner), 1892, A., 1009.
Hydroxynaphthylphenyl, *di*amido-, derivatives of (Meldola and Morgan), 1889, T., 124, 125.
Hydroxy-α-naphthylthiocarbamide (Tiemann), 1889, A., 1165; (Voltmer), 1890, A., 1127; 1891, A., 558.
2-**Hydroxynicotinic acid** (2-*hydroxypyridine*-3-*carboxylic acid*) (Weidel and Strache), 1886, A., 951.
6-**Hydroxynicotinic acid** (6-*hydroxypyridine*-3-*carboxylic acid*) and its derivatives (Koenigs and Geigy), 1884, A., 1195; (v. Pechmann and Welsh), 1885, T., 150; A., 174; (v. Pechmann), 1885, A., 176.
6-**Hydroxynicotinic acid** (6-*hydroxypyridine*-3-*carboxylic acid*), preparation of, from hydroxyquinolinic acid (Koenigs and Geigy), 1884, A., 945.
Hydroxynitroethenylamido-α-naphthol (Meerson), 1888, A., 713.
α-**Hydroxy-*o*-nitrophenylbutene-ω-dicarboxylic acid** (Einhorn and Gehrenbeck), 1890, A., 163.
Hydroxyoctoic acid (Hantzsch), 1889, A., 372.
  salts of (Young), 1883, A., 456; (Fittig and Christ), 1892, A., 962.
Hydroxyoleic acid and its salts (Liechti and Suida), 1884, A., 239.
Hydroxy*iso*-oxazoledicarboxylic acid (v. Pechmann), 1891, A., 738.
Hydroxyoxindole chloride, amido-(Jackson and Bentley), 1892, A., 1219.
Hydroxyoxydipropionic acid, chloro-(Willgerodt and Schiff), 1890, A., 959.
α-**Hydroxypalmitic acid** (Hell and Iordanoff), 1891, A., 820.
Hydroxypentanetricarboxylic anhydride (*dicarbocaprolactonic acid*) and its derivatives (Hjelt), 1883, A., 970.
Hydroxypentene, *tetr*amido- (Nietzki and Rosemann), 1889, A., 770.
α-**Hydroxypentene cyanide**, γγ-*hexa*chloro- (Zincke and Küster), 1890, A., 1256.
Hydroxypentenecarboxylic acid, γγ-*hexa*chloro- (Zincke and Küster), 1890, A., 754.
Hydroxypentic acid, identity of, with ethyltartaric acid (Gorboff), 1888, A., 1179.
Hydroxyperezone (*hydroxypipitzahoic acid*) (Anschütz and Leather), 1886, T., 728.
  and its salts (Mylius), 1885, A., 778.
  *di*bromide (Anschütz and Leather), 1886, T., 732.
Hydroxyphenanthraquinonephosphinic acid (Fossek), 1886, A., 530.
Hydroxyphenanthraquinones (Anschütz and Meyer), 1885, A., 1067.
p-**Hydroxyphenanthrazine** (Autenrieth and Hinsberg), 1892, A., 733.
Hydroxyphenanthridine (Pictet and Ankersmit), 1892, A., 197.
Hydroxyphenanthroline (La Coste), 1883, A., 811.
Hydroxyphenindulone, chloro- (Kehrmann and Messinger), 1891, A., 747.
Hydroxyphenonaphthoxanthone (v. Kostanecki), 1892, A., 1099; (Bener), 1892, A., 1100.
Hydroxyphenyl ethyl ketone. See Propionylphenol.

Hydroxyphenyl hydroxy-α- and -β-naphthyl ketones (Phomina), 1890, A., 389, 901.

Hydroxyphenyl mercaptan (Haitinger), 1883, A., 989.

Hydroxyphenyl hydroxytolyl ketone (Phomina), 1890, A., 389.

p-**Hydroxyphenylacetamide** (Salkowski), 1889, A., 1173.

Hydroxyphenylacetamidine and its hydrochloride (Beyer), 1884, A., 65; 1885, A., 982.

o-**Hydroxyphenylacetic acid** and its derivatives (v. Baeyer and Fritsch), 1884, A., 1021.

m-**Hydroxyphenylacetic acid** (Salkowski), 1884, A., 1176.

p-**Hydroxyphenylacetic acid** (Salkowski), 1884, A., 1176.
derivatives of (Salkowski), 1889, A., 1173.

α-**Hydroxyphenylacetic acid.** See Mandelic acid.

Hydroxyphenylacetimidoether and its hydrochloride (Beyer), 1884, A., 65; 1885, A., 983.

Hydroxyphenylacetonitrile, acetyl-derivative of (Michael and Jeanprêtre), 1892, A., 1088.
imidoethers of (Pinner), 1891, A., 62.

Hydroxyphenylacridine (Hess and Bernthsen), 1885, A., 801; (Besthorn and Curtman), 1891, A., 1234.

Hydroxyphenylacrylic acid. See *p*-Coumaric acid.

α-**Hydroxyphenylacrylic acid** (Plöchl), 1884, A., 605.

p-**Hydroxyphenylalanine** (Erlenmeyer and Lipp), 1883, A., 994.

o-**Hydroxyphenylallylthiocarbamide** (v. Chelmicki), 1891, A., 52.

Hydroxyphenylamidoacetic acid and derivatives (Vater), 1884, A., 1144.

Hydroxyphenylbenzenylnaphthylenediamine (Fischer), 1892, A., 1472.

6-**Hydroxy-4-phenyl-2-benzyl-*m*-diazine** and 6-**hydroxy-2-phenyl-5-benzyl-4-methyl-*m*-diazine** (Pinner), 1889, A., 1008.

γ-**Hydroxyphenylbutyramide** (Fittig and Morris), 1890, A., 890.

Hydroxy-α-phenylbutyric acid (Jayne), 1883, A., 473.

α-**Hydroxy-γ-phenylbutyric acid,** γ-bromo- (Biedermann), 1892, A., 471.

α-**Hydroxyphenyl*iso*butyric acid,** β-bromo- (Körner), 1888, A., 368; 1889, A., 372.

Hydroxyphenylbutyrolactone (Fittig), 1888, A., 595; (Fittig and Obermüller), 1892, A., 986.

α-**Hydroxy-γ-phenylbutyro-γ-lactone** (Biedermann), 1892, A., 472.

α-**Hydroxy-γ-phenylbutyronitrile,** *di*bromo- (Fischer and Stewart), 1892, A., 1447.

Hydroxyphenylcarbamide (Traube), 1889, A., 394; (v. der Kall), 1891, A., 1222.

Hydroxyphenylcarbamides, *o*- and *p*- (Kalckhoff), 1883, A., 734, 735.

o-**Hydroxy-α-phenylcinchonic acid** (Doebner), 1889, A., 410.

α-**Hydroxyphenylcrotonic acid** (Peine), 1884, A., 1344; (Tiemann), 1892, A., 471.
bromo- (Fischer and Stewart), 1892, A., 1447.

α-**Hydroxyphenylcrotonitrile** (Peine), 1884, A., 1344.

6-**Hydroxy-2-phenyl-*m*-diazine-4-carboxylbenzamidine** (Pinner), 1890, A., 69.

6-**Hydroxy-2-phenyl-*m*-diazine-4-carboxylic acid** and amide (Pinner), 1889, A., 1009.

6-**Hydroxy-5-phenyl-2:4-dibenzyl-*m*-diazine** (Wache), 1889, A., 684.

2′-**Hydroxy-3′-phenyldihydroquinazoline** (Paal and Bodewig), 1891, A., 944.

6-**Hydroxy-2-phenyl-4:5-dimethyl-*m*-diazine** (Pinner), 1889, A., 1008.

o-2-**Hydroxyphenyl-4:5-dimethylglyoxaline** (Wadsworth), 1890, T., 10.

m-4-**Hydroxyphenyl-2:6-dimethylpyridine** (Lepetit), 1887, A., 1053.

1-*o*-**Hydroxyphenyl-2:5-dimethylsuccinic acid** (Fittig and Brown), 1890, A., 777.

1-*o*-**Hydroxyphenyl-2:5-diphenylpyrroline** (Paal and Braikoff), 1890, A., 264.

Hydroxyphenylethenylamidine and its hydrochloride (Beyer), 1884, A., 65.

Hydroxyphenylethenylamidoxime and its derivatives (Gross), 1885, A., 898, 1218.

β-**Hydroxyphenylethyl methyl ketone,** *m*-chloro-*o*-nitro- (Eichengrün and Einhorn), 1890, A., 1128; 1891, A., 1099.

β-**Hydroxy-β-phenylethyl-α-*iso*amylmalonic acid** (Paal and Hoffmann), 1890, A., 1101.

Hydroxyphenylethyl*tri*chloramidoethane (Boessneck), 1888, A., 588.

6-**Hydroxy-4-phenyl-2-ethyl-*m*-diazine** (Pinner), 1889, A., 1007.

Hydroxy-β-phenyl-α-ethylpropionic acid (Perkin and Stenhouse), 1891, T., 1009.

Hydroxy-2-phenylethylpyridine (*hydroxy-α-stilbazoline*) (Butter), 1890, A., 1439.
Hydroxyphenylformamidine (Comstock and Clapp), 1892, A., 708.
o-**Hydroxyphenylglyoxylic acid** (v. Baeyer and Fritsch), 1884, A., 1021.
Hydroxyphenylhexoic acid (Erdmann), 1890, A., 377.
Hydroxyphenylhydrindone and its hydrazone (v. Miller and Rohde), 1892, A., 1221.
Hydroxyphenylhydrocoumarin (Liebermann and Hartmann), 1891, A., 1484.
  and its isomerides (Liebermann and Hartmann), 1892, A., 849.
2′-**Hydroxyphenylhydroquinoline.** See Phenylhydrocarbostyril.
6-**Hydroxy-4-phenyl-2-hydroxybenzyl-*m*-diazine** (Pinner), 1891, A., 63.
6-**Hydroxy-4-phenyl-2-hydroxy*iso*propyl-*m*-diazine** (Pinner), 1890, A., 70.
p-**Hydroxy-2′-phenyl-4-hydroxyquinoline** (Weidel and v. Georgievics), 1888, A., 967.
Hydroxyphenylic anthranilate (v. Meyer and Bellmann), 1886, A., 358.
  sulphide (Tassinari), 1887, A., 807.
  *di*sulphide (Leuckart), 1890, A., 604.
    and its compounds (Haitinger), 1883, A., 988.
    oxidation of the methyl ether of (Haitinger), 1883, A., 989.
    thio- (Leuckart), 1890, A., 604.
p-**Hydroxyphenylimidomethylenic ethylenic *di*sulphide** (Miolati), 1891, A., 895.
2′-*p*-**Hydroxyphenylindazine** (Paal), 1891, A., 724.
o-**Hydroxyphenyllactic acid** (*salicyllactic acid*) (Plöchl and Wolfrum), 1885, A., 899.
p-**Hydroxyphenyllactic acid** (Erlenmeyer and Lipp), 1883, A., 993.
α-*m*-**Hydroxyphenyl-*p*-methoxy-hydroquinoline and -quinoline** (v. Miller and Kinkelin), 1887, A., 979, 978.
Hydroxyphenylmethylamido*tri*chlorethane and its derivatives (Boessneck), 1888, A., 587.
Hydroxyphenylmethyl*iso*crotonic acid (Fittig), 1890, A., 584; (Fittig and Brown), 1890, A., 778.
4-**Hydroxy-2-phenyl-6-methyl-*m*-diazine**, derivatives of (Pinner), 1886, A., 46.
  *di*amido- (Pinner), 1887, A., 1054.
4-**Hydroxy-2-phenyl-6-methyl-*m*-diazine**, 5-bromo- (Pinner), 1887, A., 1053.
6-**Hydroxy-2-phenyl-4-methyl-*m*-diazine** (Pinner), 1885, A., 751; 1889, A., 1008; 1891, A., 468.
6-**Hydroxy-4-phenyl-2-methyl-*m*-diazine** (Pinner), 1889, A., 1007.
6-**Hydroxy-2-phenyl-4-methyl-*m*-diazine-5-acetic acid** (Pinner), 1890, A., 69.
6-**Hydroxy-2-phenyl-4-methyl-*m*-diazine-5-propionic acid** (Pinner), 1890, A., 70.
6-**Hydroxy-2-phenyl-4-methyl-5-ethyl-*m*-diazine** (Pinner), 1889, A., 1008.
6-**Hydroxy-4-phenyl-5-methyl-2-ethyl-*m*-diazine** (Schwarze), 1890, A., 1159.
Hydroxyphenyl-*p*-methylic sulphide (Tassinari), 1887, A., 807.
Hydroxy-β-phenyl-α-methylpropionic acid (Perkin and Calman), 1886, T., 159; (Perkin and Stenhouse), 1891, P., 43.
Hydroxyphenylmethylpyridazone (Ach), 1890, A., 71.
β-**Hydroxyphenylmethylpyrotartaric acid,** salts of (Fittig and Liebmann), 1890, A., 776.
4′-**Hydroxy-2′-phenyl-3-methylquinoline** (Just), 1886, A., 812.
Hydroxyphenylmethylquinoxaline (Hinsberg), 1885, A., 909.
β-**Hydroxyphenyl-α-naphthylamine,** αβ-*di*chloro- (Zincke and Kegel), 1889, A., 268.
6-**Hydroxy-4-phenyl-2-β-naphthyl-*m*-diazine** (Pinner), 1892, A., 1009.
p-**Hydroxyphenyl-*m*-nitrophenylthiocarbamide** (Steudemann), 1884, A., 307.
Hydroxyphenylphthalamic acid (Piutti), 1886, A., 1027.
p-**Hydroxyphenylphthalamide** (Piutti), 1886, A., 1026.
Hydroxyphenylpivalic acid. See β-Hydroxyphenylvaleric acid.
β-**Hydroxyphenylpropaldehyde** (*phenyl-β-lactic aldehyde*), *m*-chloro-*o*-nitro- (Eichengrün and Einhorn), 1891, A., 1100.
  o-nitro- (v. Baeyer and Drewsen), 1884, A., 58.
  m-nitro- (Göhring), 1885, A., 792.
  p-nitro-, compound of, with aldehyde, (Göhring), 1885, A., 527.
β-**Hydroxyphenylpropionamide,** *m*-chloro-*o*-nitro- (Eichengrün and Einhorn), 1890, A., 1127; 1891, A., 1100.

p-**Hydroxy-α-phenylpropionic acid** (*phloretic acid*), artificial formation of (TRINIUS), 1885, A., 529.

Hydroxy-β-phenylpropionic acids, *o*-, *m*- and *p*-. See Hydrocoumaric acids.

α-**Hydroxyphenylpropionic acid.** See Phenyl-α-lactic acid.

β-**Hydroxyphenylpropionic acid** (*phenyl-β-lactic acid*), formation of, from ethylic benzoylacetate (PERKIN), 1885, T., 254.
  bromo- (ERLENMEYER), 1883, A., 196; 1891, A., 1482.
  m-chloro-*o*-nitro- (EICHENGRÜN and EINHORN), 1890, A., 1127; 1891, A., 1099.
  α-iodo- (ERLENMEYER and ROSENHEK), 1887, A., 45.
  o-nitro- (v. BAEYER and DREWSEN), 1884, A., 58; (EINHORN), 1884, A., 66.
    alcohol of (CALM), 1883, A., 341.
    β-lactone of (EINHORN), 1884, A., 65.
  m-nitro-, lactone of (PRAUSNITZ), 1884, A., 1175.
  p-nitro- and its ethyl and methyl derivatives (BASLER), 1884, A., 604.
    β-lactone of (BASLER), 1884, A., 604.
  o-, *m*- and *p*-nitro-, etherification of (EINHORN and PRAUSNITZ), 1884, A., 1351.

β-**Hydroxyphenylpropionanilide** (*phenyl-β-lactanilide*), *p*-nitro- (BASLER), 1884, A., 1173.

β-**Hydroxyphenylpropyl ketone**, *m*-chloro-*o*-nitro- (EICHENGRÜN and EINHORN), 1891, A., 1098.

β-**Hydroxyphenylpropyl methyl ketone** and its derivatives (v. BAEYER and DREWSON), 1883, A., 341; (v. BAEYER and BECKER), 1883, A., 1120; (EICHENGRÜN and EINHORN), 1890, A., 1128; 1891, A., 1099.

Hydroxyphenylpyrazoline. See Phenylpyrazolone.

2-**Hydroxy-phenyl-γ-pyridone**, 3:5-*di*chloro-, and its carboxylic acid (ZINCKE), 1890, A., 964; (ZINCKE and FUCHS), 1892, A., 449, 448.

Hydroxyphenylpyrotartaric acid (*phenylitamalic acid*), *m*- and *p*-nitro-, and barium salts of (SALOMONSON), 1888, A., 480.

2′-*o*-**Hydroxyphenylquinoline** (*phenolquinoline*) (DOEBNER), 1889, A., 410.

2′-*m*-**Hydroxyphenylquinoline** (*phenolquinoline*), and its salts (v. MILLER and KINKELIN), 1885, A., 1145.

2′-*p*-**Hydroxyphenylquinoline** (*phenolquinoline*) (WEIDEL), 1887, A., 847.

3-**Hydroxy-2′-phenylquinoline**, *p*-amido- (WEIDEL and v. GEORGIEVICS), 1888, A., 967.

4′-**Hydroxy-2′-phenylquinoline** (JUST), 1886, A., 811; (KNORR), 1888, A., 1113.
  synthesis of (CONRAD and LIMPACH), 1888, A., 505.

4′-**Hydroxyphenylquinolines**, α- and β- (KOENIGS and MAI), 1887, A., 599.

4′-**Hydroxy-2′-phenylquinoline-3′-carboxylic acid**, and its ethyl salt (JUST), 1886, A., 161, 811.

α-**Hydroxy-α- and -β-phenylsuccinic acids.** See α- and β-Phenylmalic acids.

Hydroxyphenylsulphonic acid. See Phenolsulphonic acid.

Hydroxy-2′-phenyltetrahydroquinoline (WEIDEL), 1887, A., 848.

μ-**Hydroxy-α-phenylthiazole** (ARAPIDES), 1889, A., 413.
  chloro- (SCHATZMANN), 1891, A., 745.

Hydroxyphenylthiocarbamide (FISCHER), 1889, A., 1164; (TIEMANN), 1889, A., 1165; (VOLTMER), 1890, A., 1126; 1891, A., 558; (v. DER KALL), 1891, A., 1222.

p-**Hydroxyphenylthiocarbamide** (KALCKHOFF), 1883, A., 735.

3-**Hydroxyphenyltoluenesulphonic acid**, 4:4′-*di*amido- (WEINBERG), 1888, A., 285.

m-**Hydroxyphenyltolylamine** (ZEGA and BUCH), 1886, A., 873.

Hydroxyphenyl-*o*-tolylamines, *m*- and *p*- (PHILIP), 1886, A., 942, 941.

m-**Hydroxyphenyl-*p*-tolylamine**, nitroso- (HATSCHEK and ZEGA), 1886, A., 455.

Hydroxyphenyl-*p*-tolylamines, *m*- and *p*-, and their derivatives (HATSCHEK and ZEGA), 1886, A., 455.

6-**Hydroxy-4-phenyl-2-*p*-tolyl-*m*-diazine** (PINNER), 1891, A., 470.

Hydroxyphenyltolylethanes, *o*- and *m*- (KOENIGS and CARL), 1892, A., 446.

Hydroxyphenyltriphthalamic acid (PIUTTI), 1886, A., 1027.

β-**Hydroxyphenylvaleric acid** (*hydroxyphenylpivalic acid*) (FITTIG and JAYNE), 1883, A., 471.
  and its derivatives (OTT), 1885, A., 663.

γ-**Hydroxyphenylvaleric acid** (FITTIG and STERN), 1892, A., 988.

γ-**Hydroxyphenyl*iso*valeric acid**, salts of (FITTIG and LIEBMANN), 1890, A., 776.

Hydroxyphenylvalerolactone (FITTIG and MAYER), 1892, A., 986.

Hydroxyphosphinic acids (Fossek), 1885, A., 504; 1886, A., 529.

Hydroxyphosphinous acids (Ville), 1890, A., 618.

Hydroxy*iso*phthalaldehydes, α- and β- (Voswinckel), 1883, A., 190.

Hydroxyphthalanilide (Piutti), 1886, A., 1026.

1:2:3-**Hydroxyphthalic acid** (Jacobsen), 1883, A., 1124; (Miller), 1884, A., 1177; (Stokes), 1885, A., 540.
  *di*nitro- (*juglonic acid*) (Bernthsen and Semper), 1885, A., 548.

1:3:4-**Hydroxyphthalic acid** (Graebe), 1885, A., 902; (Graebe and Rée), 1886, T., 522; P., 211.

Hydroxy*iso*phthalic acid (Voswinckel), 1883, A., 190.

β-**Hydroxyphthalide** (Graebe and Rée), 1886, T., 525.

β-**Hydroxyphthalimide** (Graebe and Rée), 1886, T., 524.

β-**Hydroxy**-β-**phthalimidoethylic sulphide** (Gabriel), 1892, A., 130.

p-**Hydroxypiazthiole** (Autenrieth and Hinsberg), 1892, A., 734.

α-**Hydroxypicolinic acid** (α-*hydroxypyridinecarboxylic acid*), and its salts (Ost), 1883, A., 795.
  *di*chloro- (Ost), 1883, A., 795.

β-**Hydroxypicolinic acid** (β-*hydroxypyridinecarboxylic acid*) (Ost), 1883, A., 795; 1885, A., 49.
  chloro- [β-acid] (Ost), 1883, A., 795.
  chloro- [γ-acid] (Seyfferth), 1887, A., 158.

γ-**Hydroxypicolinic acid** and chloro- (Bellmann), 1884, A., 840.

Hydroxypimelic acid (Schleicher), 1892, A., 428.

6-**Hydroxy-2-pipecoline** (Bunzel), 1889, A., 904.

Hydroxypiperhydronic acid (Weinstein), 1885, A., 664.

Hydroxypiperic acids, α- and β-, oxidation of (Regel), 1887, A., 488.

2-**Hydroxypiperidine** (Wolffenstein), 1892, A., 1485.

Hydroxypiperohydrolactone (Regel), 1887, A., 488.

β-**Hydroxypiperonylethyl methyl ketone** (*piperonyllactyl methyl ketone*), and bromo- (Oelker), 1891, A., 1476.

Hydroxypipitzahoic acid. See Hydroxyperezone.

Hydroxypropamidine salts (Pinner), 1891, A., 63.

α-**Hydroxypropenylamidoxime**, β-*tri*chloro- (Richter), 1892, A., 321.

Hydroxypropenylbenzoic acid (*p-propenylsalicylic acid*) (Heymann and Koenigs), 1887, A., 241.

α-**Hydroxypropenylethenylazoxime**, β-*tri*chloro- (Richter), 1892, A., 321.

α-**Hydroxypropionic acid.** See Lactic acid.

β-**Hydroxypropionic acid.** See Hydracrylic acid.

Hydroxypropionitrile, imidoethers of (Pinner), 1891, A., 62.

ω-**Hydroxypropyl phenyl ketone** (Perkin), 1885, T., 844.

β-**Hydroxypropylacridine**, ω-*tri*chloro- (*methylacridinechloral*) (Bernthsen and Muhlert), 1887, A., 849.

α-**Hydroxypropylamine** (*amidoisopropylic alcohol*) (Liebermann and Paal), 1883, A., 909.

β-**Hydroxypropylamine**, *tri*chloro- (Fauconnier), 1888, A., 1265.

γ-**Hydroxypropylamine** (Gabriel and Weiner), 1888, A., 1293.

Hydroxypropylamylamine (Liebermann and Paal), 1883, A., 910.

β-**Hydroxypropylbenzamide** (Hirsch), 1890, A., 860.

4-**Hydroxy*iso*propylbenzoic acid**, 2-amido- (Widman), 1886, A., 466.
    action of nitrous acid and of ethylic chloroformate on (Widman), 1884, A., 1022.
  2:5- *di*bromo- (Fileti and Boniscontro), 1892, A., 604.
  2-nitro- (Widman), 1886, A., 466.
  3-nitro-, and its derivatives (Widman), 1883, A., 330; 1884, A., 316.

*exo***Hydroxy*iso*propylbenzoic acid**, 3-amido- (Widman), 1884, A., 317.
    action of acetic anhydride on (Widman), 1884, A., 302.

Hydroxypropylcarboxylphenylurethane (Widman), 1884, A., 1023.

Hydroxy*iso*propyldiphenyleneketonecarboxylic acid (Bamberger and Hooker), 1885, A., 1070.

Hydroxypropylenepiperidine (α-*lupetidylalkine*) (Ladenburg), 1891, A., 1119.

Hydroxypropylhydroxybenzoic acid (Widman), 1884, A., 1022.

α-**Hydroxy**-β-**propylidenebutyramide** (Johanny), 1891, A., 38.

Hydroxypropylmalonic acid, salts of (Hjelt), 1883, A., 456.

Hydroxypropylmethylaniline (*phenylmethylpropylalkine*) (Laun), 1884, A., 1011.

Hydroxypropylpiperidine (*piperpropylalkine*), and its derivatives (Laun), 1884, A., 1054; (Engler and Bauer), 1891, A., 1505.

α-**Hydroxypropylpiperidine.** See Conhydrin.

β-**Hydroxypropylpiperidine** (*α-pipecolylmethylalkine*) (Ladenburg), 1890, A., 68.

Hydroxypropylphosphinic acid (Fossek), 1886, A., 530.

Hydroxypropylphthalamic acid (Gabriel and Lauer), 1890, A., 472.

γ-**Hydroxypropylphthalimide** (Gabriel and Lauer), 1890, A., 472; (Lauer), 1890, A., 1089.

Hydroxypropylphthalimide, nitro- (Neumann), 1890, A., 890.

Hydroxypropylpyridine [b.p. 213°] (Engler and Bauer), 1891, A., 1505.

Hydroxypropylpyridine (*α-lutidylalkine*) (Alexander), 1890, A., 1447; (Ladenburg), 1891, A., 1119.

β-**Hydroxypropylpyridine** (*α-picolylmethylalkine*) (Ladenburg), 1890, A., 68.

α-**Hydroxypropylpyridine,** ω-*tri*chloro- (Einhorn and Liebrecht), 1887, A., 845.

α-**Hydroxypropylquinoline,** *tri*chloro- (Einhorn), 1886, A., 721.

2′-**Hydroxy-2-*iso*propylquinoline** (Widman), 1886, A., 465.

Hydroxypropylsuccinic acid, lactone of (Hjelt), 1883, A., 656, 971.

Hydroxy-*p*-*iso*propylsalicylic acid (Heymann and Koenigs), 1887, A., 241.

2-**Hydroxypyridine** (*α-pyridone*) (Koenigs and Körner), 1884, A., 85; (Koenigs and Geigy), 1884, A., 1195; (Feer and Koenigs), 1886, A., 1044; (v. Pechmann and Baltzer), 1892, A., 208.
  *di*bromo- (Koenigs and Geigy), 1884, A., 1195.
  *di*chloro- (Koenigs and Geigy), 1884, A., 1369.
  3:5-*di*iodo- (Pfeiffer), 1887, A., 845.

3-**Hydroxypyridine** (Fischer and Renouf), 1884, A., 1050; (Koenigs and Geigy), 1884, A., 1369.
  from pyridinesulphonic acid, derivatives of (Fischer and Renouf), 1884, A., 1370.
  *di*bromo- and its salts (Fischer), 1884, A., 1370.

4-**Hydroxypyridine** (*chelamide*) (Lerch), 1885, A., 46; (Haitinger and Lieben), 1885, A., 811, 966.

4-**Hydroxypyridine** (*chelamide*) from β-hydroxypicolinic acid (Ost), 1885, A., 50.
  and its *di*bromo-derivative (Lieben and Haitinger), 1883, A., 871.

6-**Hydroxypyridine,** 2:3:5-*tri*chlor-4-amido- (Stokes and v. Pechmann), 1887, A., 156.

Hydroxypyridine, amido- [m.p. 214°], and its derivatives (Krippendorff), 1885, A., 1243.

Hydroxypyridine-bases, synthesis of (Ladenburg), 1890, A., 67; 1891, A., 1092.

α-**Hydroxypyridinecarboxylic acid** (*α-hydroxypicolinic acid*) and its salts (Ost), 1883, A., 795.
  *di*chloro- (Ost), 1883, A., 795.

β-**Hydroxypyridinecarboxylic acid** (*β-hydroxypicolinic acid*) (Ost), 1883, A., 795; 1885, A., 49.
  chloro- (Ost), 1883, A., 795.

2-**Hydroxypyridine-3-carboxylic acid** (*2-hydroxynicotinic acid*) (Weidel and Strache), 1886, A., 951.

6-**Hydroxypyridine-3-carboxylic acid** (*6-hydroxynicotinic acid*), and its derivatives (Koenigs and Geigy), 1884, A., 1195; (v. Pechmann and Welsh), 1885, T., 150; A., 174; (v. Pechmann), 1885, A., 176.
  preparation of, from hydroxyquinolinic acid (Koenigs and Geigy), 1884, A., 945.

2-**Hydroxypyridine-3:4-dicarboxylic acid** (*α-hydroxycinchomeronic acid*) (Weidel and Strache), 1886, A., 951.

4-**Hydroxypyridine-2:6-dicarboxylic acid.** See Ammonchelidonic acid.

6-**Hydroxypyridine-2:3-dicarboxylic acid** (*hydroxyquinolinic acid*), and its salts (Koenigs and Körner), 1884, A., 85; (Koenigs and Geigy), 1884, A., 1195; (Feer and Koenigs), 1885, A., 1236.

3-**Hydroxypyridyl-2-butyric acid.** See Morrhuic acid.

Hydroxypyrotartaric acid (*itamalic acid*) and its salts (Beer), 1883, A., 457.
  *tri*chloro-, salts of (Fittig and Miller), 1890, A., 586.

Hydroxypyruvic acid (Will), 1891, A., 542.
  osazone of (Will), 1892, A., 356.

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Hydroxyquinhydrone (Barth and Schreder), 1885, A., 520.

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  1-nitro- (SCHMITT and ENGELMANN), 1888, A., 67; (v. KOSTANECKI), 1891, A., 579; (VIS), 1892, A., 1105.
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1-**Hydroxyquinoline** (SKRAUP), 1883, A., 92; (HERZFELD), 1884, A., 1199; (FISCHER and RENOUF), 1884, A., 1370; (KOHN), 1886, T., 500.
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1-**Hydroxyquinoline**, bromo- [m.p. 119°] (SCHMITT and ENGELMANN), 1888, A., 67.
  4-bromo- [m.p. 124°] (CLAUS and HOWITZ), 1892, A., 354.
  4:3-*di*bromo- (CLAUS and POSSELT), 1890, A., 522; (CLAUS and HOWITZ), 1892, A., 354.
  3:4:4′-*tri*bromo- (SRPEK), 1890, A., 177; (CLAUS and HEERMANN), 1891, A., 83.
  chloro-, 2:4-*di*chloro-, and 2:3:4-*tri*chloro- (HEBEBRAND), 1889, A., 60.
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2-**Hydroxyquinoline** (FISCHER), 1883, A., 91; (SKRAUP), 1883, A., 95; (CLAUS), 1888, A., 729.
2-**Hydroxyquinoline** derivatives (FISCHER), 1883, A., 91; (SKRAUP), 1883, A., 95.
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3-**Hydroxyquinoline** (SKRAUP), 1883, A., 93.
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  1-amido- (MATHËUS), 1888, A., 852; (ALTSCHUL), 1888, A., 1108.
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  4-chloro-, and 2:4-*di*chloro- (ZINCKE), 1891, A., 1249.
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  1-nitro- (SCHMITT and ALTSCHUL), 1888, A., 67; (MATHËUS), 1888, A., 965; (ALTSCHUL), 1888, A., 1108.
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3′-**Hydroxyquinoline** and its derivatives (RIEMERSCHMIED), 1883, A., 1147.
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Hydroxyquinolines, preparation of (ANON.), 1884, A., 945.
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1-**Hydroxyquinolinecarbothionylic acid** (LIPPMANN and FLEISSNER), 1888, A., 1092.
Hydroxyquinolinecarboxylic acid (*cynurenic acid; kynurenic acid*), oxidation of (KRETSCHY), 1883, A., 674.

1-Hydroxyquinolinecarboxylic acid [m.p. 250°] (Lippmann and Fleissner), 1887, A., 63, 1119; 1888, A., 1092.
  and its derivatives, behaviour of, in the organism (Królikowski and Nencki), 1888, A., 864.
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1-Hydroxyquinolinecarboxylic acid [m.p. 235°] (Schmitt and Engelmann), 1887, A., 738; 1888, A., 66.
  derivatives (Schmitt and Engelmann), 1887, A., 738.
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2′-Hydroxyquinoline-3′-carboxylic acid (*carbostyrilcarboxylic acid*) (Friedländer and Göhring), 1884, A., 1020.
2-Hydroxyquinoline-4′(?)-carboxylic acid (*xanthoquinic acid*) (Skraup), 1884, A., 86.
2′-Hydroxyquinoline-4′-carboxylic acid (*hydroxycinchonic acid*) (Koenigs and Körner), 1884, A., 84.
3-Hydroxyquinolinecarboxylic acid (Lippmann and Fleissner), 1887, A., 1120; (Schmitt and Altschul), 1888, A., 67.
1-Hydroxyquinolinedisulphonic acid (Lippmann and Fleissner), 1890, A., 268; (Claus and Posselt), 1890, A., 523.
3-Hydroxyquinoline-1′-methylbetaine (Claus and Howitz), 1891, A., 1252.
3-Hydroxyquinoline-1:4-quinone, 2-chloro-, and its anilide (Zincke), 1891, A., 1251.
1-Hydroxyquinolinesulphonic acid (Lippmann and Fleissner), 1890, A., 268.
1-Hydroxyquinoline-4-sulphonic acid (Claus and Posselt), 1890, A., 522.
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2′-Hydroxyquinolinesulphonic acid (*carbostyrilsulphonic acid*) (La Coste and Valeur), 1886, A., 629; 1887, A., 379.
3-Hydroxyquinolinesulphonic acid (Claus and Posselt), 1890, A., 523.
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Hydroxyquinolinic acid (6-*hydroxypyridine*-2:3-*dicarboxylic acid*), and its salts (Koenigs and Körner), 1884, A., 85; (Koenigs and Geigy), 1884, A., 1195; (Feer and Koenigs), 1885, A., 1236.
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3-Hydroxyquinoxaline (Autenrieth and Hinsberg), 1892, A., 732.
2′-Hydroxyquinoxaline-3′-carboxylic acid (Kühling), 1891, A., 1342.
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α-Hydroxystearic acid (Hell and Sadomsky), 1891, A., 1336.
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γ-Hydroxystearic acid (Geitel), 1888, A., 578.
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p-**Hydroxystyrolene** (Bernthsen and Bender), 1883, A., 70.
o-**Hydroxystyryl methyl ketone** (*methyl coumaro ketone*) and its derivatives (Harries), 1892, A., 169.
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p-**Hydroxy-*o*-sulphobenzoic acid** (Hedrick), 1888, A., 280; (Pisanello), 1889, A., 1063.
p-**Hydroxy-*m*-sulphobenzoic acid** and its salts (Klepl), 1884, A., 446.
1-Hydroxy-4-sulpho-β-naphthoic acid (König), 1889, A., 719; 1890, A., 636.

Hydroxysulphonebenzide (*dihydroxydiphenylsulphone*) (Tassinari), 1889, A., 245.

Hydroxyterebic acid, salts of (Roser), 1884, A., 459.

Hydroxyterephthalic acid, reduction products of (v. Baeyer and Tutein), 1889, A., 1180.

Δ^3-**Hydroxytetrahydrobenzyldimethylamine** (Merling), 1892, A., 359.

Hydroxytetrahydronaphthoic acid, bromo-, lactone of (v. Baeyer, Schoder and Besemfelder), 1892, A., 193.

1-**Hydroxytetrahydroquinoline**, preparation of methyl and ethyl derivatives of (anon.), 1883, A., 871.

3-**Hydroxytetrahydroquinoline**, bromo-, hydrochloride (Srpek), 1890, A., 177.

1-**Hydroxytetrahydroquinolinecarboxylic acid** (Lippmann and Fleissner), 1887, A., 1119.

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Hydroxytetramethylpropylenediamine (Berend), 1884, A., 1114.

4′-**Hydroxy-1:3:4:2′-tetramethylquinoline** (Conrad and Limpach), 1888, A., 504.

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Hydroxytetrethylpropylenediamine (Berend), 1884, A., 1114.

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o-**Hydroxythiocarbanilide** (Kalckhoff), 1883, A., 1110.

p-**Hydroxythiocarbanilide** (Kalckhoff), 1883, A., 735.

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Hydroxythiotoluene (Truhlar), 1887, A., 473.

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2-**Hydroxy-*m*-tolenylamidoxime** (*o-homosalicenylamidoxime*) (Paschen), 1892, A., 320.

4-**Hydroxy-*m*-tolenylamidoxime** (*p-homosalicenylamidoxime*) (Goldbeck), 1892, A., 319.

6-**Hydroxy-*m*-tolenylamidoxime** (*o-homo-p-hydroxybenzenylamidoxime*) (Paschen), 1892, A., 320.

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2-**Hydroxy-*m*-tolualdehyde** (*o-homosalicylaldehyde*) and oxime of (Paschen), 1892, A., 320.

6-**Hydroxy-*m*-tolualdehyde** (*o-homo-p-hydroxybenzaldehyde*) and oxime and phenylhydrazone of (Paschen), 1892, A., 320.

4-**Hydroxy-*m*-tolualdoxime** and **-toluamide** (*p-homo-salicyl-aldoxime* and *-amide*) (Goldbeck), 1892, A., 318.

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o-**Hydroxytoluic acid** (*o-hydroxymethylbenzoic acid*) (Hjelt), 1892, A., 715.

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5-nitro- (Hönig), 1886, A., 242.

p-**Hydroxytoluic acid**, heats of combustion and formation of (Stohmann, Kleber and Langbein), 1889, A., 1096.

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4-**Hydroxy-*m*-toluic acid** (*p-homosalicylic acid; a-cresotic acid*), occurrence of, in artificial salicylic acid (Dunstan and Bloch), 1891, A., 454.

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5-**Hydroxy-3-toluic acid**, conversion of ethylic acetoneoxalate into (Claisen), 1890, A., 364.

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2-**Hydroxy-*p*-toluic acid** (*m-hydroxymethylbenzoic acid*) (Weinreich), 1887, A., 669.

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2-**Hydroxy-*m*-toluic phenylhydrazone** (*o-homosalicylphenylhydrazone*) (Paschen), 1892, A., 320.

4-**Hydroxy-*m*-toluonitrile** (*p-homosalicylonitrile*) (Goldbeck), 1892, A., 319.

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Hydroxy-*p*-tolylacetic acid (Claus and Kroseberg), 1887, A., 949.

6-**Hydroxy-2-*p*-tolyl-5-benzyl-2-methyl-*m*-diazine** (Pinner), 1891, A., 470.

ω-**Hydroxytolylcarbamide** (Söderbaum and Widman), 1889, A., 972.

4-**Hydroxy-6-*p*-tolyl-*m*-diazine-2-carboxylic acid** (Pinner), 1892, A., 1008.

Hydroxytolylene-*o*-dicarboxylic acid, lactide of (Ephraim), 1890, A., 1143.

ω-**Hydroxytolylethylthiocarbamide** (Söderbaum and Widman), 1890, A., 178.

4-**Hydroxy-6-*p*-tolyl-2-methyl-*m*-diazine** (Glock), 1888, A., 1290.

6-**Hydroxy-2-tolyl-4-methyl-5-ethyl-*m*-diazine** (Pinner), 1891, A., 469.

4′-**Hydroxy-1-tolyl-2′-methylquinoline**, synthesis of (Knorr), 1884, A., 1198.

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ω-**Hydroxytolylphenylcarbamide** (Söderbaum and Widman), 1889, A., 973.

Hydroxy-*o*-tolylthiocarbamide (Tiemann), 1889, A., 1165; (Voltmer), 1890, A., 1126; 1891, A., 558.

6-**Hydroxy-2:4:5-triethyl-*m*-diazine** (Wache), 1889, A., 684.

o-**Hydroxytrimethylbenzaldehyde** (Auwers), 1885, A., 380.

6-**Hydroxy-2:4:5-trimethyl-*m*-diazine** (Pinner), 1889, A., 1006.

Hydroxytrimethylenediphthalamic acid (Goedeckemeyer), 1888, A., 1295.

β-**Hydroxytrimethylenediphthalimide** (Goedeckemeyer), 1888, A., 1295; (Gabriel), 1889, A., 486.

Hydroxytrimethylethylammonium hydroxide (Brieger), 1884, A., 1202.

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  platinochloride, chloro- (Bode), 1892, A., 807.

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Hydroxytrimethylpyrroline (Weil), 1886, A., 529.

4′-**Hydroxy-2′:1:3-trimethylquinoline** (Conrad and Limpach), 1888, A., 503.

Hydroxy-2′:1:3-trimethylquinolinecarboxylic acid (Conrad and Limpach), 1888, A., 504.

Hydroxytrimethyluracil, *di*bromo- and *di*chloro- (Hagen), 1888, A., 582.

Hydroxytrimethylxanthine (Hagen), 1888, A., 582.

6-**Hydroxy-2:4:5-triphenyl-*m*-diazine** (Wache), 1889, A., 684.

o-**Hydroxytriphenylmethane** (Fischer and Fränkel), 1888, A., 56.

Hydroxytropine (*oscine*) (Hesse), 1892, A., 1498.

p-**Hydroxytruxillic acid** (Liebermann and Bergami), 1889, A., 699.

β-**Hydroxy-*α*-truxillic acid** (Homans, Steltzner and Sukow), 1891, A., 1496.

Hydroxyuracil, bromonitro- (Behrend), 1887, A., 920.

γ-**Hydroxyvaleramide** (Neugebauer), 1885, A., 651; (Fittig and Rasch), 1890, A., 879.

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n-**Hydroxyvaleric acid** and its salts (Menozzi), 1884, A., 1122; (Juslin), 1885, A., 137.

γ-**Hydroxyvaleric acid**, transformation of, into its lactone (Ostwald), 1891, A., 1151; (Henry), 1892, A., 1303.

β-**Hydroxy*iso*valeric acid** (Reformatsky), 1887, A., 717.

Hydroxyvaleric acids (*α- and β-hydroxy-α-methylbutyric acids*), chloro-derivatives of (Melikoff), 1886, A., 1008; 1887, A., 30; 1888, A., 1177; (Melikoff and Petrenko-Kritschenko), 1890, A., 736, 862.

Hydroxyvalerolactone (Fittig and Urban), 1892, A., 958.

Hydroxyvinylphenylethenylamidoxime (Bornemann), 1886, A., 799.

Hydroxyvinylphenylpropionic acid, *p*-nitro- (Einhorn and Gehrenbeck), 1889, A., 397.

Hydroxyxanthine (Behrend), 1887, A., 919.

- **Hydroxyxanthone,** constitution of (Graebe), 1890, A., 505.
- **Hydroxyxanthones** (v. Kostanecki and Nessler), 1892, A., 504; (v. Kostanecki and Rutishauser), 1892, A., 1096; (Bener), 1892, A., 1100.
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  - synthesis of (v. Kostanecki and Nessler), 1891, A., 1060; (Nessler), 1891, A., 1494.
- **Hydroxyxylic acid** (2-*hydroxy*-3:5-*dimethylbenzoic acid*) (Gunter), 1884, A., 1347.
- **Hydrozincite** (v. Zepharovich), 1887, A., 1021.
- **Hygric acid** (Liebermann and Kühling), 1891, A., 586.
- **Hygrine** (Bignon), 1886, A., 388; (Stockman), 1888, A., 508; (Liebermann), 1889, A., 732; (Liebermann and Kühling), 1891, A., 586.
  - separation of, from cocaine (Howard), 1887, A., 1126.
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β-**Methoxynaphthalenesulphonic acids** (PERCIVAL), 1889, P., 73.

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Methoxynaphthoic acids, anilides of (LEUCKART and SCHMIDT), 1885, A., 1224.

p-**Methoxynicotinic acid** (v. PECHMANN and WELSH), 1885, T., 154; P., 6; A., 175.

p-**Methoxynicotinic acid,** constitution of (v. Pechmann), 1885, A., 558.

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p-**Methoxyphenoxycinnamic acid** (Valentini), 1885, A., 264.

p-**Methoxyphenylacetamide-** and **-acetonitrile** (Salkowski), 1889, A., 1173.

p-**Methoxyphenylacetic acid** (Salkowski), 1884, A., 1176.
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p-**Methoxyphenylacryl methyl ketone** (Einhorn and Grabfield), 1888, A., 477.

p-**Methoxyphenylacrylic acid** (Einhorn and Grabfield), 1888, A., 477.

m-**Methoxyphenyl-β-bromopropionic acid,** *o*-nitro- (Eichengrün and Einhorn), 1890, A., 1127.

o-**Methoxy-α-phenylcinchonic acid** (Doebner), 1889, A., 411.

1-*p*-**Methoxyphenyl-2:3-dimethylpyrazolone** (Altschul), 1892, A., 1082.

p-**Methoxyphenylethylene,** *m*-nitro- (Einhorn and Grabfield), 1888, A., 477.

p-**Methoxyphenylglyoxylic acid** (Garelli), 1891, A., 711.

p-**Methoxyphenylhydrazine** (Altschul), 1892, A., 1082.

p-**Methoxyphenylhydrazinesulphonic acid,** salts of (Altschul), 1892, A., 1081.

3-**Methoxy-2′-phenylhydroquinoline,** 2-amido- (v. Miller and Kinkelin), 1887, A., 978.

m-**Methoxyphenyllactamide,** *o*-nitro- (Eichengrün and Einhorn), 1890, A., 1128.

m-**Methoxyphenyllactic acid,** *o*-nitro- (Eichengrün and Einhorn), 1890, A., 1127; 1891, A., 1100.

4-**Methoxy-1-phenyl-3-methylphenylamine** (Philip and Calm), 1885, A., 155.

α-**Methoxy-ν-phenyl-β-methyl-μ-thiomethylglyoxaline** (Marckwald, Neumark and Stelzner), 1892, A., 152.

p-**Methoxyphenyloximidoacetic acid** (Garelli), 1892, A., 328.

o-**Methoxyphenylphenamidoacetic acid,** nitrile of (Voswinckel), 1883, A., 190.

az-*o*-**Methoxyphenyl*ald*phenylnaphthotriazine** (Meldola and Forster), 1891, T., 697.

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1-**Methoxy-2′-phenylquinoline** (Doebner), 1889, A., 411.

3-**Methoxy-2′-phenylquinoline** (Doebner), 1889, A., 411.
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p-**Methoxyphenyl-*p*-tolylmethylamine** (Hatschek and Zega), 1886, A., 457.

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2-**Methoxypyridine** (v. Pechmann and Baltzer), 1892, A., 209.

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1′-**Methoxy*iso*quinoline,** 3′-chloro- [m.p. 73°-74°] (Gabriel), 1887, A., 62.

3-**Methoxyquinoline-4′-carboxylic acid** (*quininic acid*) (Skraup), 1884, A., 86.

6-**Methoxy-2:3-quinolinic acid** (Feer and Koenigs), 1885, A., 1235.

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2-**Methoxyquinone** (Will), 1888, A., 458.

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Methoxysuccinic acid (Bredt), 1883, A., 176; (Purdie and Marshall), 1891, T., 471; P., 82.
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3-**Methoxytetrahydroquinoline** (*tetrahydro-p-quinanisoil; "thallin"*) (Skraup), 1886, A., 80; (Dragendorff and Blumenbach), 1887, A., 871.

3-Methoxytetrahydroquinoline (*tetrahydro-p-quinanisoil; "thallin"*), preparation of (Anon.), 1885, A., 1023.
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4-Methoxy-*m*-toluonitrile (*homomethylsalicylonitrile*) (Limpach), 1889, A., 499.
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α-**Methyl-β-acetylpropionic acid,** distillation of (Thorne), 1885, A., 1200.
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α-**Methylamidovaleric acid** and its derivatives (Menozzi and Belloni), 1887, A., 797.
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p-**Methylbenzenylamidoxime**, *o*-nitro-. See *p*-Tolenylamidoxime, 3-nitro-.
m-**Methylbenzhydrazoin** (Cornelius and Homolka), 1886, A., 1026.
o-**Methylbenzidine** (Hirsch), 1891, A., 210.
p-**Methylbenzil** (*phenyl tolyl diketone*) (Bucher), 1890, A., 168.
Methylbenzoic acid. See Toluic acid.
p-**Methylbenzonitrile**, *o*-nitro-. See *p*-Toluonitrile, 3-nitro-.
Methylbenzophenone. See Phenyl tolyl ketone.
o-**Methylbenzylamine** and its salts (Strassmann), 1888, A., 474; (Bamberger and Müller), 1888, A., 950.
m-**Methylbenzylamine** (Brömme), 1888, A., 1295.
p-**Methylbenzylamine** (Bamberger and Lodter), 1887, A., 719; (Zaunschirm), 1888, A., 1077; (Hinsberg), 1892, A., 65.
Methylbenzylhydroamarine (Claus), 1883, A., 203.
Methylbenzylidene, *di*thio- (Bongartz), 1888, A., 479.
Methylbenzylidenic chloride, conversion of, into triphenylbenzene (Béhal), 1889, A., 998.
Methylbergaptic acid (Pomeranz), 1892, A., 71.
Methylbismuthine *di*bromide, *di*chloride and *di*iodide (Marquardt), 1887, A., 802.
  oxide (Marquardt), 1887, A., 803.
Methylbornylcarbamide (Leuckart and Bach), 1887, A., 377.
Methylbromodiketohydrindene (Wislicenus and Kötzle), 1889, A., 1068.
β-**Methylbromumbelliferone** *di*bromide (v. Pechmann and Cohen), 1884, A., 1331.
Methylbrucine, ammonium base obtained from (Hanssen), 1885, A., 819.
Methylbutallylcarbinamine (Merling), 1891, A., 1507.
Methylbutallylcarbinol oxide, hydrated. See Trihydroxyhexane.
Methylbutylacetic acid (*heptoic acid*) (Kiliani), 1886, A., 438.
Methylbutylacetylene. See Heptinene.
Methyl-*β*-butylcarbinol (*sec.-hexylic alcohol*) (Wislicenus), 1883, A., 966.

Methyl*iso*butylcarbinol (*hexylic alcohol*) (Kuwschinoff), 1888, A., 125.

Methylbutylethylene. See Heptylene.

Methyl*iso*butylglyoxaline (*oxalmethylisoamyline*) (Radziszewski and Szul), 1884, A., 986.

Methyl*iso*butylparaconic acids, α- and β- (Fittig and Feist), 1890, A., 592.

Methylbutylphenylacetic acid (Béhal and Auger), 1890, A., 388.

Methyl*iso*butylphenyldimethylamine (*dimethyl-o-toluisobutylamine*) (Effront), 1885, A., 153.

Methyl*iso*butylquinol (Fiala), 1884, A., 1139.

s-**Methyl*iso*butylthiocarbamide** (Hecht), 1892, A., 702.

Methylcaffeidine (Wernecke), 1888, A., 69.

Methylcaffuric acid (Schmidt and Schilling), 1885, A., 995.

Methylcamphor (Minguin), 1891, A., 1500; 1892, A., 1343.

Methylcarbamide, nitroso- (v. Brüning), 1888, A., 936.

Methylcarbamido-. See Methyluramido-.

Methylcarbazacridine (Bizzarri), 1892, A., 343.

Methylcarbodinicotinic acid. See Picolinetricarboxylic acid.

Methylcarbophenyllutidyliumdehydride (Hantzsch), 1885, A., 398.

Methylcarbostyril, amido-, and nitro- (Feer and Koenigs), 1885, A., 1235.

1-**Methylcarbostyril** (*o-tolucarbostyril*), 3′-4′-*di*chloro- (Rügheimer and Hoffmann), 1886, A., 160.

3-**Methylcarbostyril** (*p-tolucarbostyril*), 3′:4′-*di*chloro-, and 3′:4′-*di*chloronitro- (Rügheimer and Hoffmann), 1886, A., 160.

4′-**Methylcarbostyril,** and derivatives (Knorr), 1884, A., 334, 1198; 1887, A., 159; (anon.), 1884, A., 757; (Fischer and Wittmack), 1884, A., 1052.
  reduction of (Knorr and Klotz), 1887, A., 278.
  nitroso- (Fischer and Wittmack), 1884, A., 1052.

Methyl-ψ-carbostyril and its derivatives (Friedländer and Müller), 1887, A., 977.

Methylcarboxyphenylacetic acid (Béhal and Auger), 1890, A., 389.

Methylcarvoxime (Goldschmidt and Zürrer), 1885, A., 1058.

Methylchlorallylcarbinol (Garzarolli-Thurnlackh), 1884, A., 1118.

2′-**Methyl*tri*chlorethylidenequinoline** (Einhorn), 1886, A., 264.

Methyl*tri*chlorobromazimidobenzene (Zincke and Arzberger), 1889, A., 502.

Methylchloroform. See *tri*Chlorethane.

Methylchrysoidine (Nölting and Stricker), 1886, A., 544.

Methyl*apo*cinchenic acid (Comstock and Koenigs), 1885, A., 1249.

Methyl*apo*cinchenine and its hydrochloride (Comstock and Koenigs), 1885, A., 1248.

Methylcinchonamine (Hesse), 1885, A., 66.

1′-**Methylcinchoninic acid** (v. Miller), 1891, A., 1097.

3′-**Methylcinchoninic acid** (v. Miller), 1890, A., 1325.

Methylcinnamene. See Tolylacetylene.

α-**Methylcinnamic acid.** See Phenylcrotonic acid.

Methylcinnamic acids. See Tolylacrylic acids.

Methylcinnamoyldextroecgonine (Deckers and Einhorn), 1891, A., 475.

Methylcinnolinecarboxylic acid (Widman), 1884, A., 1022.

Methylcitraconic acid (Fittig and Fränkel), 1890, A., 585; (Bischoff), 1891, A., 1221.

Methylcocaine (Liebermann and Giesel), 1890, A., 647, 803; (Einhorn and Marquardt), 1890, A., 913; (Giesel), 1890, A., 1011.

Methylcodeine and its derivatives (Grimaux), 1883, A., 359; (Hesse), 1884, A., 614.

Methylcolchicine (Johanny and Zeisel), 1889, A., 282.

Methylconiine (Passon), 1891, A., 1118.

Methylcopellidine. See Tetramethylpiperidine.

Methylcoumaraldehyde (*methoxycinnamaldehyde*), nitro- (v. Miller and Kinkelin), 1889, A., 990.

Methyl-*o*-coumaric acid derivatives (Schnell), 1884, A., 1165; 1887, A., 140.
  m-amido- (Schnell), 1884, A., 1165; 1887, A., 140.
  3-nitro- (v. Miller and Kinkelin), 1889, A., 989.
  5-nitro- (Schnell), 1884, A., 1165; 1887, A., 140.

Methyl-*m*-coumaric acid (*methoxycinnamic acid*) (Tiemann and Ludwig), 1883, A., 189.
  6-nitro- (Eichengrün and Einhorn), 1890, A., 1127; 1891, A., 1101.

Methyl-*p*-coumaric acid (VALENTINI), 1885, A., 264; (MAGNANIMI), 1886, A., 467.
  *di*bromide and its derivatives (EIGEL), 1887, A., 1110.
  3-nitro- (EINHORN and GRABFIELD), 1888, A., 478.
β-Methylcoumarilamide (HANTZSCH), 1886, A., 1014.
β-Methylcoumarilic acid (HANTZSCH), 1886, A., 707.
α-Methylcoumarin, thio- (ALDRINGEN), 1890, A., 624.
β-Methylcoumarin, and its derivatives (V. PECHMANN and DUISBERG), 1884, A., 67.
β-Methylcoumarone (HANTZSCH), 1886, A., 707.
α-Methylcoumaroxime (ALDRINGEN), 1890, A., 624; 1892, A., 330.
  acetate (ALDRINGEN), 1890, A., 624.
Methyl-*o*-coumarylic alcohol (HARRIES), 1892, A., 169.
β-Methylcrotonanilide, derivatives of (BRÜHL), 1892, A., 1106.
Methylcrotonic acid. See Tiglic acid.
Methylcumazonic acid, and its derivatives (WIDMAN), 1884, A., 303.
Methyl-ψ-cumidine (V. HOFMANN), 1883, A., 324.
Methylcuminaldoxime (GOLDSCHMIDT), 1890, A., 1262.
o-Methylcyanacetophenone (HALLER), 1889, A., 874.
Methylcyanethine (V. MEYER), 1883, A., 352.
Methylcyanobutine hydriodide (TRÖGER), 1888, A., 802.
Methylcyanocamphor (HALLER), 1891, A., 1499.
Methylcytisine (V. BUCHKA and MAGALHAËS), 1891, A., 750.
β-Methyldaphnetin (V. PECHMANN and COHEN), 1885, A., 56.
Methyldehydrohexone (PERKIN), 1887, T., 723.
Methyldehydrohexone-mono- and -dicarboxylic acids (PERKIN), 1887, T., 715, 717, 744, 747.
Methyldehydropentone and methyldehydropentonecarboxylic acid (MARSHALL and PERKIN), 1890, P., 138; 1891, T., 878, 880.
Methyldeoxybenzoin (MEYER and OELKERS), 1888, A., 703.
Methyldeoxybenzoins, isomeric (STRASSMANN), 1889, A., 883.
Methyldeoxybenzoincarboxylamide (HEILMANN), 1890, A., 625; 1891, A., 201.
***m*-Methyldeoxybenzoin-*o*-carboxylic acid** (HEILMANN), 1890, A., 625.
***p*-Methyldeoxybenzoin-*o*-carboxylic acid** (RUHEMANN), 1892, A., 473.
Methyldeoxystrychnine (TAFEL), 1892, A., 1014.
Methyl-αω-diacetylpentane (KIPPING and PERKIN), 1889, T., 346; P., 79.
Methyldiazoamidobenzene (*diazobenzenemethylanilide*) (FRISWELL and GREEN), 1886, T., 748; (NÖLTING and BINDER), 1888, A., 273.
Methyldibutyltetrahydrophenanthroline (SCHIFF and VANNI), 1890, A., 138.
Methyldicarbocollidyliumdehydride, and the action of acids on (HANTZSCH), 1884, A., 1046.
3-Methyl-2′:3′- or -4′-diethoxyquinoline, chloro- (RÜGHEIMER and HOFFMANN), 1886, A., 160.
Methyldiethylamine (PASSON), 1891, A., 1118.
Methyldiethylcarbinol (REFORMATSKY), 1888, A., 244.
5-Methyl-2:4-diethyl-*m*-diazine, 6-amido-. See Cyanethine.
Methyldiethylmethane. See *sec*-Hexane.
Methyldiethylphenylenediamine (WEINBERG), 1892, A., 1078.
Methyldiethylphosphine (COLLIE), 1888, T., 719.
Methyldiethylphosphonium platinochloride (CZIMATIS), 1883, A., 58.
Methyldiethylsulphine platinochloride (NASINI and SCALA), 1889, A., 115.
Methyldiethylthiocarbamide (NOAH), 1890, A., 1241.
Methyldiethyluracil (BEHREND; HOFFMANN), 1890, A., 31.
Methyldiguanide and its compounds (REIBENSCHUH), 1883, A., 974.
Methyldihydroanthracene, amido-, and its derivatives (ROEMER), 1883, A., 1137.
Methyldihydroindole, 1′-, 2-′, and 3′-, and their derivatives (WENZING), 1887, A., 957.
2′-Methyldihydroindole, actions of (BAMBERGER), 1891, A., 1097.
  action of methylic iodide on (ZATTI and FERRATINI), 1891, A., 311.
2′-Methyldihydronaphthindole (SCHIEPER), 1887, A., 154.
Methyldihydropentene methyl ketone (PERKIN), 1889, P., 142; 1890, T., 232; (MARSHALL and PERKIN), 1889, P., 143; 1890, T., 242.
  pinacone of (MARSHALL and PERKIN), 1889, P., 143; 1890, T., 248.

Methyldihydropentene methyl ketoxime (Perkin), 1889, P., 141; 1890, T., 236.

Methyldihydropentenedicarboxylic acid (Perkin), 1889, P., 142; 1890, T., 233.

  action of bromine and of hydrobromic acid on (Perkin), 1889, P., 141; 1890, T. 235.

1-Methyldihydropyrroline(Magnaghi), 1885, A., 809.

2′-Methyldihydroquinazoline (Gabriel and Jansen), 1890, A., 1443.

3′-Methyldihydroquinazoline, 2′-thio- (Söderbaum and Widman), 1890, A., 178.

Methyldiiodamine (Raschig), 1886, A., 44.

Methyl-2′:4′-diketodihydroquinazolines, 1-′ and 3′- (Abt), 1889, A., 610.

β-Methyl-αγ-diketohydrindene (Wislicenus and Kötzle), 1889, A.,1068.

α-Methyldinicotinic acid. See 2-Methylpyridine-3:5-dicarboxylic acid.

Methyldiosphenol (Shimoyama), 1888, A., 1205.

1′-Methyldioxindole (Colman), 1888, P., 96; 1889, T., 8.

ν-Methyl-ψ-dioxythiazole (Arapides), 1889, A., 414.

1:3-**Methyldiphenyl** (*phenyltoluene*) (Adam), 1888, A., 959; (Perrier), 1892, A., 851.

Methyldiphenylcarbinyl-. See Phenyltolylcarbinyl-.

Methyldiphenylene ketone oxide (Phomina), 1890, A., 901.

  See also Methylxanthone.

Methyldiphenylformamidine (Comstock and Wheeler), 1892, A., 707.

Methyldipropylamine (Passon), 1891, A., 1118.

Methyldipropylcarbinol (*octylic alcohol*) (Gortaloff and Saytzeff), 1886, A., 437.

Methyldi*iso*propyldihydroquinoline (Dennstedt), 1889, A., 402.

α-Methyldipyridyl and **α-methyldipyridyl-α-carboxylic acid** (Heuser and Stoehr), 1891, A., 81; 1892, A., 75.

Methylecgonine (Liebermann and Giesel), 1890, A., 647; (Einhorn and Marquardt), 1890, A., 913.

Methylemetonium hydroxide (Kunz), 1887, A., 981.

Methylene, derivatives of (Henry), 1886, A., 43.

  iodo-, action of, on silver nitrate (Meyer), 1892, A., 575.

  *tri*oxime (Scholl), 1891, A., 663.

Methylene-azure (Bernthsen), 1886, A., 55.

4-Methylenebis-1-phenyl-3-methylpyrazolone (Pellizzari), 1890, A., 646.

Methylene-blue. See Colouring matters.

Methylenecarbamide (v. Hemmelmayr), 1891, A., 1340.

Methylenecarbazole (Pulvermacher and Löb), 1892, A., 1466.

Methylene-cinchonic and **-cinchoxinic acids** (Claus), 1892, A., 1489, 1490.

Methylenediacetamide (Pulvermacher), 1892, A., 579.

Methylenediamines, substituted (Ehrenberg), 1887, A., 1026.

Methylenedibenzamide (Pinner), 1891, A., 469; (Thiesing), 1892, A., 467; (Pulvermacher), 1892, A., 580.

Methylenedibenzylamine. See Dibenzylmethylenediamine.

Methylenedigallic acid (Caro), 1892, A., 856.

Methylene-3:4-dihydroxybenzylic glycol (Tiemann), 1892, A., 47; (Wagner), 1892, A., 310.

Methylenedimalonic acid. See Propanetetracarboxylic acid.

Methylenedi-β-naphthylic oxide (Claus and Ruppel), 1890, A., 511.

Methylenediphenyldiamine (Pratesi), 1885, A., 782.

γ-Methylenediphenylene (Hodgkinson and Matthews), 1883, T., 164.

γ-Methylenediphenylenesulphone. See Diphenylenemethanesulphone.

α-Methylenediphenylenesulphonic acid, and the fusion of its potassium salt with potash (Hodgkinson and Matthews), 1883, T., 166.

γ-Methylenediphenylenic sulphide (Graebe and Schultess), 1891, A., 1059.

Methylenediphenylic oxide (Richter), 1884, A., 324.

Methylenediphthalimide (Neumann), 1890, A., 890.

Methylenedipiperidine (Eschweiler), 1890, A., 955; (Kraut, Eschweiler and Grossmann), 1890, A., 1092.

Methylenedipyrogallol (Caro), 1892, A., 856.

Methylenediquinoil. See Methylenequinolylquinoline.

Methylene-diresorcinol and **-diresorcylic acid** (Caro), 1892, A., 856.

Methylenedisalicylic acid (Caro), 1892, A., 855.

  condensation of, with β-resorcylic acid, with gallic acid, and with phenol (Caro), 1892, A., 856.

Methylenedisulphonic acid. See Methanedisulphonic acid.
Methylenedi-*o*- and -*p*-toluidines (Grünhagen), 1890, A., 888.
Methylenedi-*α*-toluoylamide (Thiesing), 1892, A., 467.
Methylenedi-*o*- and *p*-toluoylamides (Thiesing), 1892, A., 467.
Methylene-ethylamine (Kolotoff), 1886, A., 139.
Methylene group, replacement of the hydrogen atoms in (Wallach), 1891, A., 189.
Methylene*di*-*o*-, -*m*- and -*p*-nitranilines (Pulvermacher), 1892, A., 1450.
Methylene*di*nitrodibenzamide (Thiesing), 1892, A., 467.
Methylenephthalethimidine (Mertens), 1887, A., 51.
Methylenephthalide (Gabriel), 1885, A., 1228.
and its bromide and oxide (Gabriel), 1885, A., 164.
bromo- (Gabriel), 1885, A., 165.
nitro- (Zincke and Latten), 1892, A., 1231.
Methylenephthalomethimidine (Gabriel), 1885, A., 1228.
Methylenephthalphenimidine (Mertens), 1887, A., 52.
Methylenequinolylquinoline (*methylenediquinoil*) **hydrochloride** (Rhoussopoulos), 1883, A., 1150.
Methylene-red and -violet (Bernthsen), 1886, A., 54.
Methylenethiocarbamide (v. Hemmelmayr), 1891, A., 1339.
Methylene*di*thiodiacetamide (Pulvermacher), 1892, A., 580.
Methylene-white. See Leucomethylene-blue under Colouring matters.
Methylenic *di*bromide (*dibromomethane*) (Henry), 1884, A., 718.
bromiodide (*bromiodomethane*) (Henry), 1886, A., 44.
*di*chloride (*dichloromethane*), preparation of (Greene), 1885, A., 38.
action of benzylamine on (Kempff), 1890, A., 887.
action of, on methylbenzenes in presence of aluminium chloride (Friedel and Crafts), 1887, A., 1102.
action of water and ammonia on (André), 1886, A., 861.
physiological action of, compared with that of chloroform (Regnauld and Villejean), 1885, A., 285, 926.
substitution derivatives of (Höland), 1887, A., 905.
Methylenic *di*chloride (*dichloromethane*), *mono*- and *di*iodo- (Höland), 1887, A., 905.
chloriodide (Sakurai), 1885, T., 198; P., 20.
chlorobromide (*chlorobromomethane*) (Henry), 1886, A., 43.
chlorofluoride (Collie), 1889, T., 112; P., 16.
cyanide. See Malonodinitrile.
ethylenic *di*sulphide, μ-imido-, salts of (Miolati), 1891, A., 894.
*di*fluoride (Chabrié), 1890, A., 1053.
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*di*iodide (*diiodomethane*), formation of, from iodoform (Cazeneuve), 1884, A., 896.
refractive power of, at different temperatures (Perkin), 1891, P., 116; 1892, T., 296.
molecular refraction and dispersion of (Gladstone), 1891, T., 295.
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action of ethylic malonate on (Tanatar), 1891, A., 175; 1892, A., 1304.
action of silver nitrite on (Russanoff), 1892, A., 1415.
action of sodium ethoxide on (Mulder), 1889, A., 363.
action of sodium phenylsulphinate on (Michael and Palmer), 1885, A., 536.
oxysulphide (Bartoli and Papasogli), 1884, A., 170.
phenylimidophenylthiocarbamate (Foerster), 1888, A., 947.
propylenic *di*sulphide, μ-imido- (Miolati), 1891, A., 895.
Methylenitan. See Carbohydrates.
Methylennyl-. See Methylnonyl-.
Methylerythrohydroxyanthraquinone (Birukoff), 1887, A., 964.
Methylethenyltolylenediamine and its methiodide (Niementowski), 1887, A., 937, 938.
Methylethylacetal (Rübencamp), 1885, A., 136.
*tri*chloro- (Magnanimi), 1887, A., 28.
Methylethylacetates, solubility of (Sedlitzky), 1888, A., 250.
Methylethylacetic acid, zinc salt of (Schmidt), 1886, A., 867.
Methylethylacetoximic acid (Schramm), 1883, A., 573.

Methylethylacetylene (*pentinene*), conversion of, into propylacetylene (FAWORSKY), 1888, A., 1168.

β-Methyl-α-ethylacetylpropionic acid, distillation of (THORNE), 1885, A., 1200.

α-Methyl-β-ethylacraldehyde (*hexenoic aldehyde*) (LIEBEN and ZEISEL), 1883, A., 570; (SOLONINA), 1888, A., 806.
  action of ammonia on (HOPPE), 1889, A., 120.
  action of sulphuric acid on (LUDWIG), 1892, A., 951.
  action of sulphurous acid on (LUDWIG), 1889, A., 121.
  oxidation of (LIEBEN and ZEISEL), 1883, A., 570.
  derivatives of (LIEBEN and ZEISEL), 1883, A., 570.

Methylethylacrylic acid. See Hexenoic acid.

Methylethylamido*iso*-oxazole. See Methylethyl*iso*-oxazole.

Methylethylamine (SKRAUP and WIEGMANN), 1889, A., 1018; (HINSBERG), 1892, A., 64.

Methylethylaniline and its derivatives (CLAUS and HOWITZ), 1884, A., 1005; (CLAUS and HIRZEL), 1887, A., 135.

o-**Methylethylbenzene** (*ethyltoluene*), preparation of (CLAUS and MANN), 1885, A., 888.
  oxidation of (CLAUS and MANN), 1885, A., 888; (CLAUS and PIESZCZEK), 1887, A., 240.
  bromo- (CLAUS and PIESZCZEK), 1887, A., 240.
  mono- and *di*-nitro- (CLAUS and PIESZCZEK), 1887, A., 240.

p-**Methylethylbenzene** (ANSCHÜTZ and ROMIG), 1885, A., 769.
  *m-di*amido- (ERRERA and BALDRACCO), 1892, A., 606.

o-**Methylethylbenzene-β-sulphonic acid and chloride** (CLAUS and PIESZCZEK), 1887, A., 240.

Methylethylbromaniline (CLAUS and HOWITZ), 1884, A., 1006.

Methylethylbromoxazolone. See Methylethyloxazolone.

Methylethylcarbincarbinol (LIEBEN and ZEISEL), 1886, A., 784.

Methylethylcarboxyglutaric acid (BISCHOFF), 1891, A., 829.

3-**Methyl-2′-ethylcinchoninic acid** (v. MILLER), 1890, A., 1326.

1:3-**Methylethyl-*m*-diazine** and *di*-chloronitro- (PINNER), 1889, A., 1007.

Methylethyldicarboxyglutaric acids (BISCHOFF), 1891, A., 829.

1-**Methylethyldihydronaphthaquinone** (BÉHAL and AUGER), 1890, A., 388.

Methylethyldihydropentene methyl ketone (MARSHALL and PERKIN), 1890, T., 251.

4-**Methyl-3-ethyldihydropyridine** (*β-dihydrocollidine*) (OECHSNER DE CONINCK), 1884, A., 1047.

1′:3′-**Methylethyldihydroquinoline** (FISCHER and STECHE), 1888, A., 299.

1-**Methyl-2-ethylenetetrahydropyridine.** See Tropidine.

Methylethylene-ψ-thiocarbamide (GABRIEL), 1889, A., 849.

Methylethylenetolylaminedimethyltolylammonium iodide (HÜBNER, TÖLLE and ATHENSTÄDT), 1884, A., 1318.

as-**Methylethylethylene.** See γ-Amylene.

Methylethylglutaric acids, *p*- and *meso*- (BISCHOFF), 1891, A., 829.

1:2-**Methylethylglyoxaline** (*oxalmethylpropyline*), synthesis of (RADZISZEWSKI), 1883, A., 729.

2:1-**Methylethylglyoxaline** (*oxalethylethyline*) (RADZISZEWSKI), 1883, A., 729.
  (*oxalethyline*), properties of (WALLACH), 1883, A., 910.
  chloro-, and its derivatives (WALLACH), 1883, A., 49.

Methylethylglyoxime (SCHRAMM) 1883, A., 590.
  diacetyl-derivative of (SCHRAMM), 1884, A., 52.
  peroxide (SCHOLL), 1891, A., 316.

Methylethylhexahydropyridine. See Methylethylpiperidine.

Methylethylhexamethylene, formation of (KIPPING and PERKIN), 1889, P., 143.
  α-iodo- (KIPPING and PERKIN), 1890, T., 23.

2′-**Methylethylideneindole** (FISCHER), 1888, A., 284.

3′:2′-**Methylethylindazine** and 3′:1′-**methylethyl*iso*indazine** (FISCHER and TAFEL), 1885, A., 541, 542.

2′:1′-**Methylethylindole** (FISCHER and STECHE), 1887, A., 976.

2′:3′-**Methylethylindole** (FISCHER), 1886, A., 805; 1887, A., 149.

p-**Methyl-1′-ethylindole** (*ethyl-p-tolindole*) and *p*-**methyl-1′-ethylindole-2′-carboxylic acid** (HEGEL), 1886, A., 552.

Methylethylketol (v. PECHMANN and DAHL), 1890, A., 1235.

Methylethylketole. See 2′:1′-Methylethylindole.

Methylethylmaleic acid (Fittig and Parker), 1892, A., 814.

Methylethylmaleic anhydride (Bischoff), 1891, A., 291; (Michael and Tissot), 1891, A., 1456.

Methylethylmalic acid (Michael and Tissot), 1891, A., 1455.

Methylethylmalonic acid (Otto and Beckurts), 1885, A., 754; (Otto and Rössing), 1888, A., 45.
  thermochemistry of (Stohmann, Kleber and Langbein), 1889, A., 1097.

Methylethylnitrouracil (Lehmann), 1890, A., 32.

Methylethyl*iso*-oxazole, amido- (Burns), 1891, A., 889; (Hanriot), 1891, A., 1108; 1892, A., 79.

Methylethyloxazolone, bromo- (Hanriot), 1891, A., 1108; 1892, A., 79.

1:2-Methylethylpentamethylene (Marshall and Perkin), 1889, P., 143; 1890, T., 250.

Methylethyl-*p*-phenylenediamine (*p-amidoethyl-o-toluidine*) (Weinberg), 1892, A., 1078.

2-Methyl-4-ethylpiperidine (*copellidine*) (Schultz), 1888, A., 64.

2-Methyl-5-ethylpiperidine (*aldehyde-collidine hexahydride; copellidine*), and its derivatives (Dürkopf), 1884, A., 1054; 1885, A., 817.

2-Methyl-6-ethylpiperidine (Schultz), 1888, A., 64.

4-Methyl-3-ethylpiperidine (*β-collidine hexahydride*) (Oechsner de Coninck), 1884, A., 1048.
  physiological action of (Bochefontaine and Oechsner de Coninck), 1885, A., 681.

2:5-Methylethylpiperidylalkine. See 5-Hydroxyethyl-2-ethylpiperidine.

ββ-Methylethylpropionic acid (*hexoic acid*) (van Romburgh), 1887, A., 228; 1888, A., 447.

Methylethylpropyl*iso*butylammonium chloride, optical isomerides of (Le Bel), 1891, A., 1002.

Methylethylpropylcarbinol (*tert.-heptylic alcohol*) (Sokoloff), 1888, A., 1170.

Methylethyl*iso*propyl-*m*-diazine, amido- (v. Meyer), 1889, A., 578.

α-Methylethylpropylene (*hexylene*) (Wislicenus), 1883, A., 967.

Methylethylpropylic alcohol (*hexylic alcohol*) from essence of chamomile (van Romburgh), 1887, A., 228.

2-Methyl-4-ethylpyridine (*ethylpicoline*) (Schultz), 1888, A., 64.

2-Methyl-5-ethylpyridine (*aldehyde-collidine*) (Dürkopf), 1886, A., 257.
  constitution of (Dürkopf), 1886, A., 257; (Dürkopf and Schlaugk), 1887, A., 737; 1888, A., 499.
  reduction and oxidation-products of (Dürkopf), 1885, A., 817.

2-Methyl-6-ethylpyridine (*ethylpicoline*) (Schultz), 1888, A., 64.

4-Methyl-3-ethylpyridine (*β-collidine*) (Hantzsch), 1883, A., 83; (Oechsner de Coninck), 1883, A., 739.
  physiological action of (Marcus and Oechsner de Coninck), 1883, A., 104.
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6-Methyl-4-ethylpyridine (*α-collidine*) (Weidel and Pick), 1885, A., 557.

Methylethylpyridines (*collidines*), preparation of (Mai and Aschoff), 1892, A., 725.

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2-Methyl-1-ethylpyrrolidone-2-carbothioxylamide and **-2-carboxylamide** (Kühling), 1890, A., 793.

2-Methyl-1-ethylpyrrolidone-2-carboxylic acid (Kühling), 1890, A., 793.

Methylethylquinol and its derivatives (Fiala), 1884, A., 1138; 1886, A., 454; (Nölting and Werner), 1891, A., 209.

3′-Methyl-2′-ethylquinoline and its salts (Doebner and v. Miller), 1884, A., 1376; (Harz), 1886, A., 262; (Eliasberg and Friedländer), 1892, A., 1107.

3′-Methyl-2′-ethylquinoline-1-carboxylic acid (v. Miller), 1890, A., 1326.

3-Methyl-2′-ethylquinoline-3′-carboxylic acid (Harz), 1886, A., 261.

***as*-Methylethylsuccinic acid** (Bischoff), 1891, A., 829; (Hell), 1891, A., 1018.

***s*-Methylethylsuccinic acid** (Young), 1883, T., 180; (Bischoff and Walden), 1889, A., 959; (Bischoff and Mintz), 1890, A., 743.

Methylethylsuccinic acids (Bitschichin and Zelinsky), 1890, A., 741.

2′-Methyl-1′-ethyltetrahydroquinoline (Möller), 1888, A., 298.

α-Methyl-μ-ethylthiazole (Hubacher), 1891, A., 220.

μ-Methyl-α-ethylthiazole (Hantzsch), 1890, A., 1238; (Rubleff), 1891, A. 223.

m-**Methyl-*p*-ethyltoluene** (Claus), 1892, A., 985.

Methylethyltriphenyl*di*thiobiuret (Billeter and Strohl), 1888, A., 365.

Methylethyluracil (Behrend; Hoffmann), 1890, A., 31.

β-**Methyl-α-ethylvalerolactone** (Young), 1883, T., 172, 178; A., 456.

Methyleugenol, glycol from (Wagner), 1892, A., 310.

Methyl*iso*eugenol, glycol from (Wagner), 1892, A., 311.
  *di*bromide (Ciamician and Silber), 1890, A., 967.
  nitrosite of (Angeli), 1892, A., 447.

Methylfenchylamine (Wallach and Griepenkerl), 1892, A., 1239.

Methylflavolinium hydroxide. See 2′-Phenyl-1′:4′-dimethylquinolinium hydroxide.

Methylformanilide (Pinner), 1883, A., 1090; (Norton and Livermore), 1887, A., 1038; (Barbier and Vignon), 1888, A., 689; (Pictet), 1890, A., 758.
  m-nitro- (Comstock and Wheeler), 1892, A., 706.

Methyl*iso*formanilide (Comstock), 1890, A., 1258; (Comstock and Kleeberg), 1890, A., 1414.
  m-nitro- (Comstock and Wheeler), 1892, A., 706.

Methylformimide hydrochloride (Pinner), 1883, A., 1089.

Methyl*iso*formo-α-naphthalide (Comstock and Wheeler), 1892, A., 705.

Methylformo-*p*-toluidide (Bamberger and Wulz), 1891, A., 1202.

Methyl*iso*formo-*o*- and -*p*-toluidides (Comstock and Clapp), 1892, A., 707, 708.

Methyl-fumaramic acid and **-fumarimide** (Giustiniani), 1892, A., 821.

Methylfurfuraldehyde (Hill), 1889, A., 695; (Maquenne), 1890, A., 33.

Methylfurfurancarboxyacetic acid. See Methronic acid.

Methylfurfurine (Bieler and Tollens), 1890, A., 1105.

α-**Methylglutaric acid** (*butanedicarboxylic acid*) (Kiliani), 1883, A., 962.
  thermochemistry of (Stohmann, Kleber and Langbein), 1889, A., 1097.

β-**Methylglutaric acid** (*butanedicarboxylic acid; ethylidenediacetic acid*) (Komnenos), 1884, A., 422; (Auwers, Köbner and v. Meyenburg), 1892, A., 41.

β-**Methylglutaric acid** (*butanedicarboxylic acid; ethylidenediacetic acid*), *di*bromo- (Auwers and Bernhardi), 1891, A., 1191.

α-**Methylglyceric acid** and its salts (Melikoff), 1885, A., 651.

β-**Methyl*iso*glyceric acid** (Melikoff and Petrenko-Kritschenko), 1892, A., 296.

β-**Methylglycidamide,** *tri*chloro- (Levy, Witte and Curchod), 1890, A., 234.

β-**Methylglycidic acid** and its salts (*propyleneoxycarboxylic acid*) (Melikoff), 1884, A., 1301; 1885, A., 650.
  additive product of methylamine and (Fielinsky), 1885, A., 752.

β-**Methyl*iso*glycidic acid** (Melikoff and Petrenko-Kritschenko), 1892, A., 296.

γ-**Methylglycidic acid.** See Butylglycidic acid.

Methylglycocine. See Sarcosine.

Methylglyoxalbisphenylhydrazone (v. Pechmann and Wehsarg), 1887, A., 1104; 1889, A., 47.

Methylglyoxal-*αω*-hydrazoxime (v. Pechmann and Wehsarg), 1889, A., 47.

1-**Methylglyoxaline** (*oxalmethyline*) (Wallach), 1883, A., 50; (Wohl and Marckwald), 1889, A., 867.
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2-**Methylglyoxaline** (*glyoxalethyline; p-oxalmethyline*) (Wallach), 1883, A., 50, 911; (Radziszewski), 1883, A., 308.
  synthesis of (Japp), 1883, T., 17; 198; (Radziszewski), 1883, A., 728.
  *tri*bromo- (Wallach), 1883, A., 911.

2-**Methylglyoxaline-4:5-dicarboxylic acid** (Maquenne), 1890, A., 1439.

Methylglyoxal-*αω*-methylphenylhydrazoxime (v. Pechmann and Wehsarg), 1889, A., 48.

Methylglyoxalosotetrazone (v. Pechmann), 1888, A., 1288.

Methylglyoxime (Scholl), 1891, A., 287.
  action of nitric peroxide on (Scholl), 1891, A., 316.
  diacetyl-derivative of (Schramm), 1884, A., 52.

Methyl*syn*glyoximecarboxylic acid (Hantzsch), 1892, A., 1176.

Methylglyoximecarboxylic acids, dissociation constants of (Hantzsch and Miolati), 1892, A., 1268.

Methylguanicil (Curatolo), 1891, A., 539.

Methylguvacine (Jahns), 1892, A., 740.

Methylheptonic acid and lactone (Fischer), 1890, A., 599.

Methylheptose (Fischer), 1890, A., 599.

Methylhesperidin (Will), 1885, A., 906.

Methylhexadecylbenzenes (*hexadecyltoluenes*), *o*-, *m*- and *p*- (Krafft and Göttig), 1889, A., 129.

p-**Methylhexadecylbenzene**, amido- (Krafft and Göttig), 1889, A., 130.

p-**Methylhexadecylbenzenesulphonic acid**, sodium salt of (Krafft and Göttig), 1889, A., 130.

p-**Methylhexadecylphenetoil and methylhexadecylphenol** (Krafft and Göttig), 1889, A., 130.

α-**Methylhexahydroanthracene** (Graebe and Juillard), 1888, A., 156.

1-**Methylhexahydronicotinic acid** (Jahns), 1892, A., 740.

Methylhexamethylene methyl ketone (Freer and Perkin), 1888, T., 213.

Methylhexamethylene-mono- and **-dicarboxylic acids** (Freer and Perkin), 1888, T., 207.

o-**Methylhexamethylenemethylcarbinol** (Kipping and Perkin), 1889, P., 144.

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Methylhexylcarbinyl cyanide (Freund and Schönfeld), 1892, A., 132.

Methylhexyldiphenolmethane (Dianin), 1889, A., 1187.

β-**Methylhexylethylene** (Freund and Schönfeld), 1892, A., 133.

1:2-**Methylhexylglyoxaline** (*oxalmethyl-œnanthyline*) (Karcy), 1887, A., 911.

Methylhexylhydroxypyrotartaric acids α- and β-, salts of (Fittig and Feist), 1890, A., 593; (Fittig and Riechelmann), 1890, A., 593, 594.

Methylhexylparaconic acids, α- and β- (Fittig and Riechelmann), 1890, A., 593, 594.

α-**Methylhomo-*o*-phthalimide** and *-o*-**phthalonitrile** (Gabriel), 1887, A., 1112.

α-**Methylhomopiperidic acid** (Aschan), 1891, A., 1246.

α-**Methylhomoterephthalic acid** (Errera), 1891, A., 1021.

Methylhydantoin (*lactylcarbamide*) (Franchimont and Klobbie), 1889, A., 1143.
  nitro- (Franchimont and Klobbie), 1888, A., 1180; 1889, A., 125, 1143.

γ-**Methylhydantoin** (Guareschi), 1892, A., 828.

Methyl-hydrastallylamide and **-hydrast*iso*amylamide** (Freund and Heim), 1891, A., 92, 93.

Methylhydrast-amide and **-imide** and its methiodide (Freund and Heim), 1891, A., 92.

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Methylhydrastine (Freund and Rosenberg), 1890, A., 532; (Schmidt), 1890, A., 1167.
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Methylhydrasto-methyl- and **-ethylamides** (Freund and Heim), 1891, A., 93.

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Methylhydrazidobenzenesulphonic acid (Pfülf), 1887, A., 934.

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  action of, on dialdehydes and diketones (Kohlrausch), 1890, A., 24.

Methylhydrazomethylenecarboxylic acid, ammonium salt of (Curtius and Lang), 1892, A., 452.

γ-**Methylhydrindene**-β-**carboxylic acid** (Roser), 1887, A., 836; 1888, A., 1303.

o-**Methylhydrindone** and its phenylhydrazone (Young), 1892, A., 1221.

Methylhydrindones, *m*- and *p*- (v. Miller and Rohde), 1890, A., 1140.

β-**Methylhydrindone** and its phenylhydrazone (v. Miller and Rohde), 1890, A., 1139.
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Methylhydroacridine (Bernthsen and Bender), 1883, A., 1134.

Methylhydroberberine (Giacosa and Soave), 1890, A., 920; (Gaze), 1890, A., 1012.

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Methylhydrocarbostyril, 2-amido- (Edeleanu), 1888, T., 560; P., 55.
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α-**Methylhydrocinnamic acid.** See Phenyl*iso*butyric acid.
p-**Methylhydrocinnamic acid** (Kröber), 1890, A., 969; (v. Miller and Rohde), 1890, A., 1140.
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  bromo- (Freund and Dormeyer), 1892, A., 223.
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β-**Methylhydroxylamine** (Dittrich), 1891, A., 317; (Hoffmann and Meyer), 1892, A., 291; (Kirpal), 1892, A., 1067.
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  estimation of, in presence of ethylic alcohol (de Poncy), 1885, A., 298; (van de Vyvere), 1885, A., 600; (Hehner), 1887, A., 1142.
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Methylic salts of abnormal structure (Wegscheider), 1892, A., 1208.
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  allylic sulphide (Obermeyer), 1888, A., 124.
  amidoacetate and its hydrochloride (Curtius and Goebel), 1888, A., 576.
  o-amidobenzoate, action of ammonia on derivatives of (Zacharias), 1891, A., 912.
  m-amidocumate (Abenius), 1890, A., 269.

Methylic β-amidoethylcrotonate and "amidomethylacetoacetate" (Conrad and Epstein), 1888, A., 253.
- amidoformate, action of nitrous acid on (Klobbie), 1891, A., 292.
- α-amidopropionate hydrochloride (Curtius and Lang), 1892, A., 453.
- *di*amidopyromellitate (Nef), 1890, A., 987.
- amidosulphobenzoate (Hentschel), 1885, A., 792.
- amidoterephthalate (Ahrens), 1886, A., 802.
- ammonium sulphate (Krafft and Bourgeois), 1892, A., 700.
- amylic sulphide (Obermeyer), 1888, A., 124.
- anacardate (Ruhemann and Skinner), 1887, T., 665; P., 102.
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- anisate, thermochemistry of (Stohmann, Kleber and Langbein), 1890, A., 101.
- anisylimidoanisylthiocarbamate and anisyl*di*thiocarbamate (Foerster), 1888, A., 944, 945.
- anthracene-γ-carboxylate (Behla), 1887, A., 594.
- apionylglyoxylate (Garelli), 1892, A., 328.
- azimethylenedicarboxylate (Curtius and Lang), 1892, A., 452.
- azinsuccinate (Curtius and Koch), 1885, A., 886.
- benzeneazocamphocarboxylate (Haller), 1892, A. 1344.
- benzeneazocyanacetate (Haller), 1888, A., 824.
- benzeneazo*di*nitrophenylacetate (Meyer), 1888, A., 693.
- benzenesulphonate (Krafft and Roos), 1892 A., 1220.
- benzilate (Klinger and Standke), 1889, A., 885.
- benzoylcocaylhydroxyacetate (Einhorn), 1889, A., 420.
- benzoylcyanacetate (Barthe), 1888, A., 951.
- benzylidenedibenzoylacetate (Buchner and Curtius), 1885, A., 1238.
- benzyl-*p*-nitrobenzoylacetate (Perkin and Bellenot), 1886, T., 446; P., 193.
- *m*-bromacetamidocumate (Abenius), 1890, A., 270.
- *di*bromacetylcarbopyrrolate (Ciamician and Silber), 1888, A., 62.
- *di*bromanisate (Balbiano), 1883, A., 1125.

Methylic β-bromhydromuconate (v. Baeyer and Rupe), 1890, A., 876.
- *p*-bromobenzenesulphonate (Krafft and Roos), 1892, A., 1220.
- *di*bromomaleate (Pum), 1888, A., 1058.
- bromophenoxynicotinate (v. Pechmann), 1885, A., 176.
- bromo*iso*propylphenylic oxide, oxidation of (Peratoner), 1887, A., 472.
- *di*bromopyrroline-2:5-dicarboxylate (Ciamician and Silber), 1888, A., 61.
- bromosalicylate (Peratoner), 1887, A., 486.
- bromo-*p*-terephthalate (Fileti), 1887, A., 52.
- bromotetramethylenecarboxylate (Perkin and Sinclair), 1891, P., 191; 1892, T., 43.
- bromundecylenate (Noerdlinger), 1890, A., 1237.
- β-*iso*butoxyquartenylate (Enke), 1890, A., 865.
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- carboxymethylacetoacetate (Claisen), 1892, A., 1070.
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- ω-chlorethylpiperonylcarboxylate (Perkin), 1890, T., 1032; P., 117.
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- chlorocarbonate, preparation of (Klepl), 1883, A., 311.
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- chlorofumarate (Kauder), 1885, A., 652.
- *tetra*chloro-α-hydroxyhydrindenecarboxylate (Zincke and Arnst), 1892, A., 858.
- β-chlorophthalate (Graebe and Rée), 1886, T., 529; P., 212.
- *tetra*chlorophthalate, crystalline form of (Soret), 1886, A., 620.
- β-chloroquartenylate (Enke), 1890, A., 865.
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- coumalanilidate (v. Pechmann and Welsh), 1885, A., 175.
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- crotonate, action of methylic alcohol on (Purdie and Marshall), 1891, T., 476; P., 82.
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- *di*cyanacetate (Haller), 1890, A., 1395.
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- *iso*dehydracetate (Anschütz, Bendix and Kerp), 1891, A., 172.
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- dihydroterephthalate and its *di*bromide (v. Baeyer), 1888, A., 1072, 1073.
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- dihydroxypyromellitate and dihydroxydihydropyromellitate (Nef), 1890, A., 987.
- *p*-diketohexamethylenetetracarboxylate (Nef), 1890, A., 987.
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2′-**Methyloctohydro-β-naphthaquinolines** (*ar- and ac-octohydro-β-naphthaquinaldines*) and their compounds (Bamberger and Strasser), 1891, A., 1513.
2:5-**Methyloctylthiophen** and its bromo-derivative (v. Schweinitz), 1886, A., 536.

Methylœnanthaldoxime (Goldschmidt and Zanoli), 1892, A., 1436.

Methyl-orange. See Helianthin.

Methyloxalacetic acid (Arnold), 1888, A., 1179.

Methyloxalacetophenylimide (Wislicenus and Sattler), 1891, A., 903.

Methyloxamic acid (Hantzsch), 1885, A., 398.

Methyloxanilide (Norton and Livermore), 1887, A., 1038.

Methyl*iso*-oxazoles, *α*- and *γ*- (Claisen), 1892, A., 1073.

Methyloxazoline picrate (Gabriel), 1889, A., 1134.

Methyl*iso*-oxazolone (Hantzsch), 1891, A., 740.

Methyloxindole, 3′-*mono*- and *di*-bromo-, and 3′-*di*chloro- (Colman), 1888, P., 96; 1889, T., 3, 4, 7.

***p*-Methyloxindole,** nitroso- (Meyer), 1884, A., 48.

Methyloxyanthranol (Liebermann), 1888, A., 715.

Methyloxymethylene*tri*bromopyrogallol (Semmler), 1892, A., 311.

Methyloxypyridine. See Methylpyridone.

Methyloxyquinazoline. See Hydroxymethylquinazoline and Oxymethylquinazoline.

Methyloxyquinizine. See Phenylmethylpyrazolone.

***iso*Methylpæonol** (Tahara), 1892, A., 846.

Methylparaconic acid (Fittig and Fränkel), 1890, A., 584.

*di*chloro- (Fittig and Miller), 1890, A., 587.

*tri*chloro- (Fittig), 1888, A., 252; (Fittig and Miller), 1890, A., 586.

Methylpentadecylacetylene (*octodecinene*) (Krafft and Reuter), 1892, A., 1163.

Methylpentamethylene methyl ketone (Colman and Perkin), 1888, T., 198.

Methylpentamethylene-*mono*- and -*di*-carboxylic acids (Colman and Perkin), 1888, T., 193, 198.

Methylpentamethylenemethylcarbinol (Marshall and Perkin), 1889, P., 143; 1890, T., 245.

Methylpentamethylenemethylcarbinyl acetate and iodide (Marshall and Perkin), 1889, P., 143; 1890, T., 249.

Methylpentamethylenic *di*bromide, and action of sodium on (Freer and Perkin), 1888, T., 205, 214.

***β*-Methyl-pentathienone** and **-pentathiophen** (Kreckeler), 1887, A., 239.

Methylphenanthridines, 3- and 5- (Pictet and Erlich), 1892, A., 197.

See also Phenylindole.

Methylphenanthroline and its derivatives (Skraup and Fischer), 1885, A., 392; (Nölting and Trautmann), 1891, A., 327; 1892, A., 729.

Methylphenanthrolines, isomeric (Gerdeissen), 1889, A., 520.

Methylphenazine and its salts (van Romburgh), 1886, A., 546.

Methylphenolsulphonic acid (Haitinger), 1883, A., 990.

Methylphenomorpholine (Knorr), 1889, A., 1220.

Methyl-*α*-phenotetrazine (Hempel), 1890, A., 613.

Methyl-*α*-phenotriazine (Bischler), 1890, A., 149.

p-bromo- (Bischler and Brodsky), 1890, A., 152.

Methylphenol. See Cresol.

Methylphenylamine. See Methylaniline.

Methylphenylpropiolic acid. See Tolylpropiolic acid.

Methylphenyl-. See also Phenylmethyl-.

***α*-Methylphthalic acid** [m.p. 152°] (Niementowski), 1892, A., 607.

Methylphthalic acids [m.ps. 144° and 124°], (Young), 1892, A., 1221.

Methylphthalic anhydride (Young), 1892, A., 1221.

Methylphthalide, *di*- and *tetra*-chloro- (Zincke and Cooksey), 1890, A., 786.

*di*chloronitro- (Zincke and Latten), 1892, A., 1231.

Methylphthalimide [m.p. 182°] and its derivatives (Graebe and Pictet), 1884, A., 1019; 1889, A., 141.

[m.p. 183°] (Young), 1892, A., 1221.

[m.p. 196°] (Niementowski), 1892, A., 607.

Methylphthalimidine (Graebe and Pictet), 1889, A., 141; (Barbier), 1889, A., 253.

Methylphthalo *ψ*-cumidamide (Fröhlich), 1884, A., 1319.

***α*-Methylphthalodiamide** (Niementowski), 1892, A., 607.

Methylpiaselenole (Hinsberg), 1889, A., 785.

chloro- (Hinsberg), 1890, A., 973.

Methylpiazothiole (Hinsberg), 1890, A., 161.

Methylpicrazide (v. Brüning), 1890, A., 23.

Methyl-*α*-pipecoline (1:2-*dimethylpiperidine*) (Ladenburg), 1883, A., 1154; (Merling), 1891, A., 1508.

Methylpipecolylalkine. See Hydroxyethylmethylpiperidine.

2-**Methylpiperideine** (Ladenburg), 1887, A., 740.

1-**Methylpiperidine** (Ladenburg), 1883, A., 1154.

2-**Methylpiperidine** and its derivatives (Ladenburg), 1884, A., 1054; 1887, A., 64, 283; (Ladenburg and Roth), 1885, A. 557.

  synthesis of (Ladenburg), 1884, A., 1054.

  oxidation of (Bunzel), 1889, A., 904.

  α-methylpiperylthiocarbamate (Ladenburg and Roth), 1885, A., 557.

3-**Methylpiperidine** and its derivatives (Ladenburg), 1884, A., 760; 1887, A., 64; (Hesekiel), 1885, A., 812; 1886, A., 257; (Stoehr), 1888, A., 63; 1892, A., 629.

  bases (Lellmann and Büttner), 1890, A., 1003.

4-**Methylpiperidine** (Ladenburg), 1888, A., 499.

3-**Methylpiperidone** (Aschan), 1891, A., 1246.

Methylpiperyl-azone and **-tetrazone** derivatives (Knorr), 1884, A., 468.

Methylpropargylamine (Paal and Hermann), 1890, A., 230.

Methyl*iso*propenylcarbinol (Kondakoff), 1886, A., 137; 1888, A., 125.

Methylpropionylacetonitrile (v. Meyer), 1889, A., 114; (Bouveault), 1891, A., 51.

Methyl-*n*- and -*iso*-propylacetic acids. See Hexoic acids.

Methyl*iso*propylacetone. See Methyl amyl ketone.

Methylpropylacetoximic acid. See Methylpropylglyoxime.

Methylpropylacetylene, conversion of, into butylacetylene (Faworsky), 1888, A., 1169.

Methylpropylacrylic acid (Reformatsky), 1891, A., 169.

Methylpropylallylcarbinol, glycerol from (Reformatsky), 1890, A., 121.

Methylpropylaniline and its derivatives (Claus and Hirzel), 1887, A., 134.

Methylpropylbenzene. See Cymene.

1-**Methyl-3-propyl-2-benzoic acid** (*p-propyl-o-toluic acid*) (Kreysler), 1885, A., 1055.

1-**Methyl-3-propyl-4-benzoic acid** (*cymylcarboxylic acid*) (Claus and Cropp), 1886, A., 463.

Methylpropylcarbinol (*sec-amylic alcohol*) (Markownikoff), 1884, A., 1280.

Methylpropylcarbinol (*sec-amylic alcohol*), formation of (Marshall and Perkin), 1891, T., 874.

  *tri*chloro-, and its derivatives (v. Garzarolli-Thurnlackh), 1884, A., 1118.

o-**Methyl-*p*-propylcoumarin** (v. Pechmann and Welsh), 1884, A., 1346.

p-**Methylpropyldihydroxydiphenylic sulphide** (Tassinari), 1887, A., 808.

β-**Methylpropylethylenelactic acid** (Reformatsky), 1891, A., 169.

Methyl*iso*propylethylenic glycol (Fossek), 1884, A., 833; (Swoboda and Fossek), 1891, A., 31.

Methylpropylethylenic oxide (Eltekoff), 1883, A., 567.

s-**Methylpropylglutaric acids** (Bischoff and Tigerstedt), 1890, A., 1103.

1:2-**Methylpropylglyoxaline** (*oxalmethylbutyline*) (Rieger), 1889, A., 119.

1:2-**Methyl*iso*propylglyoxaline** (*oxalmethylisobutyline*) (Rieger), 1889, A., 120.

2:1-**Methylpropylglyoxaline** (*oxalpropylethyline*), synthesis of (Radziszewski), 1883, A., 729.

Methylpropylglyoxime (Schramm), 1884, A., 52.

α-**Methylpropyl-β-hydroxybutyric acid,** decomposition of, by heat (Jones), 1885, A., 376.

Methyl*iso*propylmalonic acid (van Romburgh), 1887, A., 232.

Methylpropylphenanthrene. See Retene.

o-**Methyl-*p*-propylphenyl methyl ketone** (Claus and Cropp), 1886, A., 463.

Methylpropylpinacoline (Szymanski), 1886, A., 784.

Methylpropylpyridine (3:5-*dimethyl*-2-*ethylpyridine*) (Waage), 1884, A., 172; (Dürkopf and Göttsch), 1890, A., 795, 1002.

Methylpropylquinol (Fiala), 1884, A., 1138.

5:2-**Methylpropylquinone** and its oxime, 6-iodo- (Kehrmann), 1889, A., 993.

Methylpropylthiocarbamide (Hecht), 1890, A., 476.

Methylpropylthiocarbanilide (Billeter and Strohl), 1888, A., 364.

Methylprotocotoin (Ciamician and Silber), 1892, A., 63.

  action of phosphoric chloride on (Bartolotti), 1892, A., 1314.

Methylpurin, derivatives of (Fischer), 1884, A., 996.

3-**Methylpyrazolone** (Curtius and Jay), 1889, A., 393.

2-**Methylpyridine.** See α-Picoline.

3-Methylpyridine. See β-Picoline.

4-Methylpyridine. See *p*-Picoline.

2-Methylpyridine-4-carboxylic acid (*α-picoline-4-carboxylic acid*) (Böttinger), 1884, A., 758.

2-Methylpyridine-5-carboxylic acid (Dürkopf), 1885, A., 817.

4-Methylpyridine-2-carboxylic acid (Bachér), 1889, A., 163.

4-Methylpyridine-3-carboxylic acid (*homonicotinic acid*) (Oechsner de Coninck), 1883, A., 739; 1885, A., 671.

3-Methylpyridinedicarboxylic acid [COOH = 5:6 or 2:5] (Dürkopf and Schlaugk), 1888, A., 608; (Dürkopf and Göttsch), 1890, A., 1002.

2-Methylpyridine-3:5-dicarboxylic acid (*methyldinicotinic acid*) (Weber), 1887, A., 1117.

2-Methylpyridine-4:6-dicarboxylic acid (*uvitonic acid*) (Altar), 1887, A., 379.
formation of, from pyruvic acid (Böttinger), 1884, A., 759.

1-Methyl-α-pyridone (*oxymethylpyridine*) (v. Pechmann and Baltzer), 1892, A., 209.

1-Methyl-γ-pyridone and its derivatives (Haitinger and Lieben), 1885, A., 966.

1-Methyl-4-pyridone-6-carboxylic acid, 2:3:5-*tri*chloro- (Zincke and Fuchs), 1892, A., 450.

Methylpyrocatechol (*homopyrocatechol*) (Béhal and Desvignes), 1892, A., 1312.
and its nitro-derivatives (Cousin), 1892, A., 1443.

Methylpyromucic acid (Hill), 1889, A., 695; (Hill and Hendrixson), 1890, A., 601.

Methylpyrrodiazole (Andreocci), 1892, A., 636.

1-Methylpyrrolidine (Ciamician and Magnaghi), 1885, A., 1243.

2-Methylpyrrolidine (Tafel), 1887, A., 463; (Tafel and Neugebauer), 1889, A., 1015.

3-Methylpyrrolidine (Tafel), 1887, A., 463; (Oldach), 1887, A., 735.

2-Methylpyrrolidone (Tafel), 1887, A., 463; 1889, A., 961.

2-Methylpyrrolidone-2-carbonitrile (Kühling), 1889, A., 1212.

2-Methylpyrrolidone-2-carboxylamide (Kühling), 1890, A., 793.

1-Methylpyrroline (Ciamician and Dennstedt), 1885, A., 378.
action of nascent hydrogen on (Ciamician and Magnaghi), 1885, A., 809.

1-Methylpyrroline, *tetra*bromo- (de Varda), 1889, A., 57.

2-Methylpyrroline (Dennstedt and Lehne), 1889, A., 1209.
action of acetic anhydride on (Ciamician and Silber), 1886, A., 719.
action of methylic iodide on (Ciamician and Anderlini), 1889, A., 728.
action of phthalic anhydride on (Dennstedt and Zimmermann), 1886, A., 1044.

3-Methylpyrroline (Dennstedt and Lehne), 1889, A., 1209.
action of acetic anhydride on (Ciamician and Silber), 1886, A., 719; 1887, A., 843.
action of phthalic anhydride on (Dennstedt and Zimmermann), 1886, A., 1044.

Methylpyrrolinebisazobenzene (Fischer and Hepp), 1886, A., 1041.

1-Methylpyrrolineketonedicarboxylic acid (Zanetti), 1890, A., 1431.

Methylpyrryl methyl ketone [b.p. 201°] (*ψ-acetylmethylpyrroline*) (Ciamician and Dennstedt), 1885, A., 378.

Methylpyrryl methyl ketone [b.p. 240°] (Ciamician and Silber), 1886, A., 719.
3:4-*di*bromo- (Ciamician and Silber), 1888, A., 62.

2-Methylpyrryl styryl ketone (Dennstedt and Lehne), 1889, A., 1209.

1-Methylpyrrylalloxan (Ciamician and Silber), 1886, A., 897.

Methylpyrrylcarbinol (Dennstedt and Zimmermann), 1886, A., 1042.

1-Methylpyrrylglyoxylic acid (de Varda), 1889, A., 57.
constitution of, and its *tri*bromo-derivative (de Varda), 1890, A., 389, 390.

Methylquercetin (Herzig), 1888, A., 1309.

Methylquinaldine. See Dimethylquinoline.

4′-Methylquinaldone. See 4′-Oxy-1′:2′-dimethylquinoline.

2′-Methylquinazoline (Bischler), 1891, A., 745.

Methylquinidine (Claus), 1892, A., 1250.

Methylquinine, preparation of (Lippmann), 1892, A., 222.

Methylquinol. See Toluquinol.

1-Methylquinoline (*-o-toluquinoline*), derivatives of (Herzfeld), 1884, A., 1198, 1199.
4-amido- [m.p. 143°] (Nölting and Trautmann), 1891, A., 327; 1892, A., 728.

1-**Methylquinoline** (*o-toluquinoline*), 3-bromo-, and its derivatives (Alt), 1889, A., 1214.
  4-chloro-, and some of its salts (Gattermann and Kaiser), 1886, A., 79.
  2′:3′:4′-*tri*chloro- (Rügheimer and Hoffmann), 1886, A., 160.
  iodo- (La Coste), 1885, A., 815.
  2-nitro- (Nölting and Trautmann), 1891, A., 327.
  3-nitro- (Lellmann and Ziemssen), 1891, A., 1257.
  4-nitro- (Nölting and Trautmann), 1892, A., 728.
2-**Methylquinoline** (*m-toluquinoline*) (Magnanini), 1890, A., 1322.
3-**Methylquinoline** (*p-toluquinoline*), derivatives of (Herzfeld), 1884, A., 1199.
  amido- [m.p. 132°] (Fourneaux), 1885, A., 400.
  1-amido- [m.p. 62°] (Nölting and Trautmann), 1891, A., 327; 1892, A., 728.
  4-amido- [m.p. 145°] (Nölting and Trautmann), 1891, A., 325; 1892, A., 727.
  2′:3′:4′-*tri*chloro- (Rügheimer and Hoffmann), 1884, A., 1023.
    preparation and derivatives of (Rügheimer and Hoffmann), 1886, A., 159.
  4-chloro-1-amido- (Nölting and Trautmann), 1891, A., 327; 1892, A., 728.
  1-nitro- (Fourneaux), 1885, A., 400; (Nölting and Trautmann), 1891, A., 327; 1892, A., 728.
  4-nitro- (Nölting and Trautmann), 1891, A., 325, 327; 1892, A., 727.
1′-**Methylquinoline,** 4′-bromo-4-nitro- (Claus and Decker), 1889, A., 728.
2′-**Methylquinoline** (*quinaldine*) (Fischer and Kuzel), 1883, A., 588; (Doebner and v. Miller), 1883, A., 602; (Wallach and Wüsten), 1883, A., 1097; (anon.), 1884, A., 756.
  formation of (Schultz), 1884, A., 1373.
  synthesis of (v. Miller), 1891, A., 1101; 1892, A., 1245.
  preparation of (Friedländer and Göhring), 1883, A., 1148; (Drewsen), 1883, A., 1149; (Doebner and v. Miller), 1884, A., 183; (Schultz), 1884, A., 337; (anon.), 1884, A., 757; 1885, A., 106.
  conversion of 2′-methylindole into (Magnanini), 1888, A., 957.
  condensation of, with aldehydes (v. Miller), 1887, A., 975.
2′-**Methylquinoline** (*qninaldine*), condensation of *m*-nitrobenzaldehyde with (Wartanian), 1891, A., 329.
  condensation of, with *p*-nitrobenzaldehyde (Bulach), 1889, A., 527.
  action of sulphur on (v. Miller), 1888, A., 966.
  combination of, with formamide (Cleve), 1887, A., 381.
  bases (Doebner and v. Miller), 1884, A., 183, 1373.
  bye-products of (Doebner and v. Miller), 1886, A., 370.
  derivatives of (anon.), 1884, A., 756.
  alkylic iodides (Möller), 1888, A., 298.
  homologues of (Doebner and v. Miller), 1884, A., 1375.
  methiodide (Doebner and v. Miller), 1884, A., 184.
  oxide (*methylquinolinium hydroxide*) (Bernthsen and Hess), 1885, A., 559.
  salts of (Doebner and v. Miller), 1883, A., 602.
2′-**Methylquinoline,** 2-amido- (Gerdeissen), 1889, A., 520.
  derivatives of (Doebner and v. Miller), 1884, A., 1373.
  3′-amido- and 3′:4′-*di*amido- and their hydrochlorides (Conrad and Limpach), 1888, A., 1111.
  bromo- (Magnanini), 1887, A., 1113; 1890, A., 1322.
  3′-chloro- (Knorr and Antrick), 1885, A., 274; (Magnanini), 1887, A., 1113; 1890, A., 1322.
    synthesis of (Busch and Koenigs), 1892, A., 505.
  4′-chloro- (Conrad and Limpach), 1887, A., 680; (Conrad and Eckhardt), 1889, A., 520.
  *di*chloro- (Gnehm), 1884, A., 1028.
  *tri*chloro- and 4′-chloro-3′-nitro- (Conrad and Limpach), 1888, A., 1111.
  1- and 2-nitro-, and their salts (Doebner and v. Miller), 1884, A., 1373.
  3′:4′-nitramido- (Conrad and Limpach), 1888, A., 1111.
  thio- (Roos), 1888, A., 500; (Conrad and Limpach), 1888, A., 1109.
3′-**Methylquinoline**, preparation of (v. Miller), 1891, A., 1095.
4′-**Methylquinoline** (*lepidine; cincholepidine*) (Krakau), 1886, A., 162; (Knorr), 1887, A., 159.
  synthesis of (Beyer), 1886, A., 630.
  colouring matters from (Hoogewerff and van Dorp), 1885, A., 673.

4′-Methylquinoline (*lepidine; cincholepidine*), derivatives (Heymann and Koenigs), 1888, A., 852.
  formation of, from quinenine and cinchenine (Koenigs), 1890, A., 1433.
4′-Methylquinoline, 2′-amido- (Klotz), 1888, A., 1113; (Ephraim), 1892, A., 1488.
  3-amido- (Busch and Koenigs), 1890, A., 1437.
  bromo- (Magnanini), 1887, A., 1113; 1890, A., 1322.
  2′-chloro- (Knorr), 1887, A., 159.
  3′-chloro- (Magnanini), 1887, A., 1113; 1890, A., 1322.
  1-nitro- (Busch and Koenigs), 1890, A., 1435.
  2′-thio- (Roos), 1888, A., 500.
2-Methylquinoline quinoneoximes (Nölting and Trautmann), 1891, A., 326; 1892, A., 727, 728, 729.
2′-Methyl*iso*quinoline (Krauss), 1891, A., 86.
4′-Methyl*iso*quinoline (Le Blanc), 1888, A., 1114.
  1′:3′-*di*chloro- (Gabriel), 1887, A., 1112.
Methylquinolines (Doebner and v. Miller), 1885, A., 1079.
  substituted in the pyridine-ring (Rügheimer and Hoffmann), 1886, A., 159.
  oxidation of (v. Miller), 1891, A., 1095.
  derivatives of (Nölting and Trautmann), 1892, A., 726.
2′-Methylquinoline-3-acrylic acid (v. Miller and Kinkelin), 1886, A., 265.
2′-Methylquinolineacrylic acids (*quinaldineacrylic acids*) [m.ps. 246° and 184°] (Eckhardt), 1889, A., 521.
2′-Methylquinoline-2-aldehyde (*quinaldinealdehyde*) (Eckhardt), 1889, A., 522.
2′-Methylquinoline-3-aldehyde (v. Miller and Kinkelin), 1886, A., 265.
1-Methylquinoline-4-carboxylic acid (Lellmann and Alt), 1887, A., 502.
2′-Methylquinoline-1-, -2- and -3-carboxylic acids and their salts (Doebner and v. Miller), 1884, A., 1200.
2′-Methylquinoline-3′-carboxylic acid and its ethylic salt (Friedländer and Göhring), 1883, A., 1149.
2′-Methylquinoline-4′-carboxylic acid (*aniluvitonic acid*) and its derivatives (Böttinger), 1884, A., 320; (Beyer), 1886, A., 630.
  constitution of (Küsel), 1886, A., 1027.
2′-Methylquinoline-4′-carboxylic acid (*aniluvitonic acid*), oxidation of (Böttinger), 1891, A., 1092.
3′-Methylquinoline-2′-carboxylic acid (Doebner and v. Miller), 1884, A., 1376.
2′-Methylquinoline-3:4′-dicarboxylic acid (v. Miller), 1890, A., 1325.
1-Methylquinoline-3-sulphonic acid (Herzfeld), 1884, A., 1198; (Lellmann and Ziemssen), 1891, A., 1257.
1-Methylquinoline-4-sulphonic acid (Herzfeld), 1884, A., 1199.
3-Methylquinoline-1-sulphonic acid (Fischer and Wittmack), 1884, A., 1052; (Herzfeld), 1884, A., 1199.
2′-Methylquinoline-1-sulphonic acid (Doebner and v. Miller), 1884, A., 1373.
  preparation of (Anon.), 1885, A., 945.
2′-Methylquinoline-2-sulphonic acid, constitution of (Richard), 1891, A., 329.
2′-Methylquinoline-2- or -4-sulphonic acid (Doebner and v. Miller), 1884, A., 1373.
2′-Methylquinoline-3-sulphonic acid (Doebner and v. Miller), 1884, A., 1373.
  preparation of (Anon.), 1885, A., 945.
2′-Methylquinoline-3′-sulphonic acid, preparation of (Anon.), 1885, A., 945.
2′-Methylquinoline-4′-sulphonic acid (Herzfeld), 1884, A., 1199.
4′-Methylquinoline-1(?)-sulphonic acid (Weidel and Hazura), 1885, A., 562.
4′-Methylquinoline-3-sulphonic acid (Busch and Koenigs), 1890, A., 1434.
Methylquinolinesulphonic acids, 1- and 3- (Lellmann and Ziemssen), 1891, A., 1257.
1′-Methyl-2′-quinolone, bromo- and 4-nitro- derivatives of (Decker), 1892, A., 879.
2′-Methylquinolyl benzoate (Conrad and Limpach), 1888, A., 1109.
  ethylic sulphide and mercaptan (Roos), 1888, A., 501, 500.
  phenyl ketone (Geigy and Koenigs), 1885, A., 1236.
4′-Methylquinolyl ethylic sulphide, mercaptan and *di***sulphide** (Roos), 1888, A., 501, 500.
2′-Methylquinolyl-3-ethylene-2′-quinoline (Bulach), 1889, A., 528; (Wartanian), 1891, A., 330.
Methylquinone. See Toluquinone.
***p*-Methylquinophthalone** (Jacobsen and Reimer), 1884, A., 335.
1-Methylquinoxaline (*toluquinoxaline*) (Hinsberg), 1884, A., 1053.

2-**Methylquinoxaline**, derivatives of (NIEMENTOWSKI), 1889, A., 1065.
3-**Methylquinoxaline-2′:3′-dicarboxylic acid** (HINSBERG), 1885, A., 910.
Methylresorcinol. See Orcinol.
Methylrosindone (FISCHER and HEPP), 1890, A., 909.
Methylrosindulone (KEHRMANN and MESSINGER), 1891, A., 1213.
"**Methylsaccharin**" (ANON.), 1890, A., 382; (RANDALL), 1891, A., 1228; (WEBER), 1892, A., 1092.
o-**Methylsalicenylamidoxime.** See *o*-Methoxybenzenylamidoxime.
Methylsalicylalcamphor. See *o*-Methoxybenzylidenecamphor.
o-**Methylsalicylaldehyde.** See *o*-Methoxybenzaldehyde.
Methylsaligenylcamphor (HALLER), 1891, A., 1499.
Methylscopoletilic acid and **methylscopoletin** (TAKAHASHI), 1889, A., 256.
Methylselenazole, amido- (HOFMANN) 1889, A., 726.
α-**Methyl-selenazylamine** and **-selenazylamine-*β*-carboxylic acid** (HOFMANN), 1889, A., 726, 727.
Methylsemicarbazide (V. BRÜNING), 1890, A., 23.
Methylstilbazole. See Styrylmethylpyridine.
Methylstilbazoline (*phenethylmethylpiperidine*) (BACHÉR), 1889, A., 163.
p-**Methylstilbene** (ANSCHÜTZ), 1885, A., 1065.
  chloro- (SUDBOROUGH), 1892, A., 1224.
p-**Methylstilbenedisulphone** (OTTO and DAMKÖHLER), 1885, A., 263.
Methylstrychnic acid (TAFEL), 1892, A., 1012.
  methiodide (TAFEL), 1891, A., 1263.
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Methylstrychnine (TAFEL), 1890, A., 1447; 1891, A., 1263.
*iso***Methylstrychnine** (TAFEL), 1891, A., 1264.
Methylstyrene. See Tolylacetylene.
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3-**Methylthiophen-5-carboxylic acid** (Zelinsky), 1887, A., 921.

4-**Methylthiophen-5-carboxylic acid** (*γ-thiotolenic acid*) (Demuth), 1886, A., 538; (Levi), 1886, A., 540; (Gerlach), 1892, A., 830.

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Naphtholphthalein anhydride (Meyer), 1891, A., 1029.
α-Naphtholsulphonamidosulphonic acid [ε-] (Bernthsen), 1890, A., 387.
α-Naphtholsulphonamidosulphonic acid [δ-] (Bernthsen), 1891, A., 215.
α-Naphtholsulphonic acid, amido- (Schmidt), 1892, A., 476.
α-Naphthol-1′-sulphonic acid (Erdmann), 1889, A., 157.
  4-amido- (Reverdin and De la Harpe), 1892, A., 996.
α-Naphthol-2-sulphonic acid (Bender), 1889, A., 717; (Cleve), 1892, A., 345.
  4-amido- (Seidel), 1892, A., 721; (Reverdin and de la Harpe), 1892, A., 996.
α-Naphthol-2-[?]sulphonic acid and its salts (Claus and Knyrim), 1886, A., 156.
α-Naphthol-2′-sulphonic acid (Bender), 1889, A., 717.
α-Naphthol-4-sulphonic acid (Erdmann), 1889, A., 157; (Bender), 1889, A., 717; (Witt and Kaufmann), 1892, A., 194.
  2-amido- (Reverdin and De la Harpe), 1892, A., 996.
  2-nitroso- (Witt and Kaufmann), 1892, A., 195.
    metallic salts of (Hoffmann), 1892, A., 346.
α-Naphthol-4′-sulphonic acid (Erdmann), 1889, A., 157.
  2-amido- (Reverdin and De la Harpe), 1892, A., 996.
β-Naphtholsulphonic acid (Claus and Volz), 1886, A., 246.
  amido- (Schmidt), 1892, A., 476.
  iodo- (Ostermayer), 1885, A., 673.

β-Naphthol-1′-sulphonic acid [α-] (Witt), 1889, A., 275; (Nietzki and Zübelen), 1889, A., 515.
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  calcium salt of, physiological action of (Stackler), 1892, A., 1116.
  1-amido- (Witt), 1889, A., 271; (Reverdin and De la Harpe), 1892, A., 996.
  *di*amido- (Nietzki and Zübelen), 1889, A., 515.
β-Naphthol-2′-sulphonic acid [δ-, or F.-] (Bayer and Duisberg), 1887, A., 733; (Weinberg), 1888, A., 160.
  constitution of (Armstrong and Wynne), 1889, P., 53.
  1-amido- (Witt), 1889, A., 272; (Reverdin and De la Harpe), 1892, A., 996.
β-Naphthol-3′-sulphonic acid, constitution of [β-] (Armstrong and Wynne), 1889, P., 53.
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  1-amido- (Witt), 1889, A., 272; (Reverdin and De la Harpe), 1892, A., 996.
  1-bromo-, derivatives of (Armstrong and Rossiter), 1889, P., 72.
  1-chloro- and its derivatives (Armstrong and Rossiter), 1889, P., 72; 1891, P., 33.
  1-nitroso-, metallic salts of (Hoffmann), 1892, A., 346.
β-Naphthol-4′-sulphonic acid [γ-] (Claus), 1889, A., 714.
  constitution of (Armstrong and Wynne), 1889, P., 53.
  1-amido- (Witt), 1892, A., 272; (Reverdin and De la Harpe), 1892, A., 996.
α-Naphthol-2:4-2′-trisulphonic acid (Claus and Mielcke), 1886, A., 716; (Bender), 1889, A., 718.
β-Naphthol-3:3′-1′-trisulphonic acid (Levinstein), 1883, A., 737; (Limpach), 1883, A., 1136.
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Naphthol-yellow, S., constitution of (Armstrong and Wynne), 1890, P., 16.
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α-Naphthonitrile (*α-cyanonaphthalene*) (Boessneck), 1883, A., 807.
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  4′-chloro- (Ekstrand), 1884, A., 1361.
  4′-nitro- (Graeff), 1884, A., 80.
β-Naphthonitrile (*β-cyanonaphthalene*), action of sodium on alcoholic (Bamberger and Boekmann), 1887, A., 840.
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  1:3′-*di*bromo- (Claus and Philipson), 1891, A., 462.
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α-Naphthonitrilesulphonic acid (*α-cyanonaphthalenesulphonic acid*) (Dutt), 1883, A., 1001; (Armstrong and Williamson), 1887, P., 43.
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α-Naphthoyl-α-naphthenylamidoxime (Ekstrand), 1887, A., 373.
β-Naphththiamide (Bamberger and Boekmann), 1887, A., 675.
Naphthyl benzyl ketone (Päpcke), 1888, A., 702.
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  amido-. See Ethoxynaphthylamine.
α-Naphthyl glycidyl ether (Lindemann), 1891, A., 1199.
Naphthyl mercaptans, α- and β-, amido- (v. Hofmann), 1887, A., 839.
α-Naphthyl methyl ketone and its derivatives (Pampel and Schmidt), 1887, A., 252; (Claus and Feist), 1887, A., 271.
β-Naphthyl methyl ketone (Müller and v. Pechmann), 1890, A., 52; (Schweitzer), 1891, A., 729.
Naphthyl methyl ketones (Roux), 1888, A., 1306; (Claus and Tersteegen), 1891, A., 214.

Naphthyl methyl ketones, action of phosphoric chloride on (LEROY), 1892, A., 495.

α-Naphthyl phenyl ketone and its derivatives (VINCENT and ROUX), 1884, A., 609; (ELBS), 1887, A., 943; (ROSPENDOWSKI), 1886, A., 625; (ELBS and STEINIKE), 1886, A., 947; (KEGEL), 1888, A., 1307.
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β-Naphthyl phenyl ketone (VINCENT and ROUX), 1884, A., 609; (ROSPENDOWSKI), 1886, A., 625; (KEGEL), 1888, A., 1307.

α-Naphthylacetamide and **α-naphthylacetonitrile** (BOESSNECK), 1883, A., 808.

α-Naphthylacetic acid (BOESSNECK), 1883, A., 808.

β-Naphthylacetic acid (CLAUS and TERSTEEGEN), 1891, A., 215; (SCHWEITZER), 1891, A., 730.

Naphthylacetylenes, α- and β-, and their derivatives (LEROY), 1892, A., 495, 496.

α-Naphthylacrylic acid (*α-naphthacinnamic acid*) (BRANDIS), 1889, A., 1200.

β-Naphthylalkylamines, reduction of (BAMBERGER and MÜLLER), 1889, A., 888.

Naphthyl-β-allylsemithiocarbazide (AVENARIUS), 1891, A., 550.

α-Naphthylamidoacetic acid (*naphthylglycocine*) (BISCHOFF and NASTVOGEL), 1889, A., 1015; (JOLLES), 1889, A., 1199; (FORTE), 1890, A., 900.
  calcium salt of (MAUTHNER and SUIDA), 1891, A., 39.

β-Naphthylamidoacetic acid (JOLLES), 1889, A., 1199.

Naphthylamidoacetic acids, derivatives of (JOLLES), 1889, A., 1199; (BISCHOFF and HAUSDÖRFER), 1890, A., 1309; 1892, A., 1341.

α-Naphthylamidoacetic naphthylamide (BISCHOFF and HAUSDÖRFER), 1892, A., 1341.

β-Naphthylamidoacetic naphthylamine (JOLLES), 1889, A., 1199.

α-Naphthylamidoacetyl-α-naphthylamineacetic acid (BISCHOFF and HAUSDÖRFER), 1892, A., 1341.

Naphthylamidobenzoic acids, *m*-amido- and *m*-nitro-, *p*-α- and β- (HEIDENSLEBEN), 1891, A., 307.

Naphthylamidobiazolones, α- and β- (FREUND), 1892, A., 510, 508.

Naphthylamidobutyric acids, α- and β- (BISCHOFF and MINTZ), 1892, A., 1338.

Naphthylamido*iso*butyric acids, derivatives of (BISCHOFF and MINTZ), 1892, A., 1342.

α-Naphthylamidocyanuric chloride (FRIES), 1886, T., 314.

β-Naphthylamidocyanuric chloride (FRIES), 1886, T., 740.

Naphthylamidoethylphthalimides, α- and β- (NEWMAN), 1891, A., 1208.

Naphthylamidopropionic acids, α- and β- (BISCHOFF and HAUSDÖRFER), 1892, A., 1337.

Naphthylamidosuccinic acids, α- and β- (HELL and POLIAKOFF), 1892, A., 860.

Naphthylamidosuccinic dinaphthylamide (HELL and POLIAKOFF), 1892, A., 860.

α-Naphthylamido-ψ-thiobiazolone (HELL and POLIAKOFF), 1892, A., 510.

Naphthylamidothiobiazolones, α- and β- (FREUND), 1892, A., 511, 508.

Naphthylamine (*amidonaphthalene*), chloro*tri*nitro- [m.p. 252°] (CLEVE), 1890, A., 626.

α-Naphthylamine, manufacture of (WITT), 1887, A., 1048.
  refractive power of, at different temperatures (PERKIN), 1892, T., 303.
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  platinothiocyanate (GUARESCHI), 1892, A., 287.

α-Naphthylamine, 3′-bromo- (MELDOLA), 1885, T., 508; P., 72.
  4-bromo- (GUARESCHI), 1884, A., 843; (MELDOLA), 1885, T., 508; P., 72.
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  2:4-*di*bromo- (MELDOLA), 1885, T., 510; P., 72.
  4:2-bromonitro- (MELDOLA), 1885, T., 500; P., 71; (ARMSTRONG and ROSSITER), 1891, P., 186; (MELDOLA and DESCH), 1892, T., 765.
  2-chloro- and 2:4-*di*chloro- (CLEVE), 1887, A., 495.

α-**Naphthylamine**, 1′:4′-*di*chloro- (Schwechten), 1890, A., 620.
  2′:4′-*di*chloro- (Erdmann), 1889, A., 265; (Schwechten), 1890, A., 620.
  2-nitro-, and its derivatives (Lellmann), 1884, A., 751; (Lellmann and Remy), 1886, A., 624.
  2:4-*di*nitro- (Witt), 1886, A., 947.
    preparation of (Meldola), 1887, A., 152.
  2:4:1′:4′- and 2:4:2′:4′-*tetra*nitro- (Merz and Weith), 1883, A., 344.
  2-nitroso- (Harden), 1890, A., 630.
β-**Naphthylamine**, action of diazo-compounds on (Lawson), 1885, A., 802, 1238.
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  platinothiocyanate (Guareschi), 1892, A., 287.
β-**Naphthylamine**, *di*amido-, hydrochlorides of (Loewe), 1890, A., 1424.
  1-bromo- (Meldola), 1885, T., 508; P., 72; (Lellmann and Schmidt), 1888, A., 289.
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  1:3′-*di*bromo- (Lawson), 1885, A., 1239; (Armstrong and Rossiter), 1891, P., 32; (Claus and Philipson), 1891, A., 461.
  1:4-*di*bromo- (Meldola), 1885, T., 497; P., 72; 1886, P., 173; (Armstrong and Rossiter), 1891, P., 186.
  *tri*bromo- (Claus and Philipson), 1891, A., 462.
β-**Naphthylamine**, 4:1-bromiodo- (Meldola and Desch), 1892, T., 767; P. 141.
  1-chloro- (Cleve), 1887, A., 961.
  1′:4′-*di*chloro- (Claus and Philipson), 1891, A., 462.
  1:4-chlorobromo- (Meldola and Desch), 1892, T., 768.
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  1′- and 4′-nitro- (Friedländer and Szymanski), 1892, A., 1234, 1233.
  *di*nitro- [m.p. 238°—242°] (Graebe and Drews), 1884, A., 1036.
  1′:4′-*di*nitro- (Onufrowicz), 1891, A., 321.
  *tri*nitro- [m.p. 240—266°] (Staedel), 1883, A., 863.
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  action of *di*brom-α-naphthol on (Meldola), 1884, T., 160.
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  action of diazo-*p*-nitrobenzene on (Meldola), 1883, T., 430.
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  bromo-, identity of supposed isomerides (Armstrong and Rossiter), 1891, P., 188; (Meldola and Desch), 1892, T., 766.
Naphthylaminealloxan (Pellizzari), 1888, A., 142, 681.
α-**Naphthylaminebenzylidenesulphonic acid.** See α-Naphthyl-ω-imidotoluenesulphonic acid.
α-**Naphthylaminebisdiazobenzene** (Krohn), 1889, A., 152.
Naphthylaminebisazobenzenes, α- and β- (Nietzki and Diesterweg), 1888, A., 1082, 1083.
α-**Naphthylamine-3:1′-disulphonic acid** [ε-] (Armstrong and Wynne), 1890, P., 15; (Bernthsen), 1890, A., 386; (Schultz), 1890, A., 388.
α-**Naphthylamine-4:1′-disulphonic acid** (*Schöllkopf acid*) (Bernthsen), 1890, A., 386.
  constitution of (Armstrong and Wynne), 1890, P., 126.

α-Naphthylamine-4:2′-disulphonic acid (*Dahl No. III.*), constitution of (Armstrong and Wynne), 1890, P., 16.
α-Naphthylamine-4:3′-disulphonic acid (*Dahl No. II.*), constitution of (Armstrong and Wynne), 1890, P., 125.
β-Naphthylamine-1:3′-disulphonic acid (Forsling), 1889, A., 276.
  constitution of (Armstrong and Wynne), 1890, P., 130.
β-Naphthylamine-1′:3′-disulphonic acid (*Amido-G.-acid*) (Landshoff), 1885, A., 312.
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β-Naphthylamine-3:2′-disulphonic acid (*Cassella's δ-acid*), constitution of (Armstrong and Wynne), 1890, P., 127.
β-Naphthylamine-3:3′-disulphonic acid (*Amido-R.-acid*), constitution of (Armstrong and Wynne), 1890, P., 12.
β-Naphthylamine-4:2′-disulphonic acid (*Andresen's acid*) (Schultz), 1890, A., 388; (Armstrong and Wynne), 1891, A., 27.
α-Naphthylaminephthalein (Vanni), 1886, A., 68.
α-Naphthylamine-3′-sulphonamide (*naphthionamide*) (Ekbom), 1891, A., 573.
α-Naphthylamine-4-sulphonamide (Cleve), 1890, A., 635.
α-Naphthylamine-4′-sulphonamide (Ekbom), 1890, A., 994.
Naphthylaminesulphonic acid, iodo- (Ostermayer), 1885, A., 673.
α-Naphthylaminesulphonic acid (δ-*Hirsch acid*) (Hirsch), 1888, A., 1200.
α-Naphthylamine-1′-sulphonic acid (Erdmann), 1889, A., 156.
α-Naphthylamine-2-sulphonic acid (Cleve), 1892, A., 345.
α-Naphthylamine-2′-sulphonic acid [δ-] (Cleve), 1889, A., 155.
  2-chloro- (Cleve), 1892, A., 1479.
α-Naphthylamine-3-sulphonic acid [γ-] (Cleve), 1886, A., 1037; 1889, A., 154.
α-Naphthylamine-4-sulphonic acid (*naphthionic acid*) (Witt), 1886, A., 364; (Erdmann), 1889, A., 156.
  constitution of (Witt), 1886, A., 889.
  nitration of (Nietzki and Zübelen), 1889, A., 513.
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α-Naphthylamine-4-sulphonic acid, 4′-nitro- (Nietzki and Zübelen), 1889, A., 514.
α-Naphthylamine-4′-sulphonic acid (*naphthalidenesulphonic acid*) (Witt), 1886, A., 554; (Lange), 1888, A., 160; (Erdmann), 1889, A., 156.
  conversion of, into *di*chloronaphthalene (Erdmann), 1888, A., 290.
β-Naphthylamine-1′-sulphonic acid (*Badische-acid*) (Forsling), 1886, A., 890; 1887, A., 962.
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  constitution of (Armstrong and Wynne), 1889, P., 50; (Immerheiser), 1889, A., 514; (Forsling), 1889, A., 718.
β-Naphthylamine-2′-sulphonic acid [δ-], and its derivatives Bayer) and Duisberg), 1887, A., 732; (Weinberg), 1888, A., 160.
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β-Naphthylamine-3′-sulphonic acid (*Brönner's acid*) (Landshoff), 1885, A., 312; (Forsling), 1887, A., 375.
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  1-chloro- (Armstrong and Wynne), 1889, P., 36, 48.
β-Naphthylamine-4′-sulphonic acid (Forsling), 1887, A., 963.
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β-Naphthylaminesulphonic acids, properties of the four (Green), 1889, T., 36.
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β-**Naphthylamine-3:1′:3′-trisulphonic acid** (Landshoff), 1885, A., 312.

α-**Naphthylaspartic acid** (Hell and Poliakoff), 1892, A., 860.

β-**Naphthylbenzoglycocyamine,** and its hydrochloride (Griess), 1883, A., 669.

β-**Naphthylbenzylamine** (Kohler), 1888, A., 50.

α-**Naphthylbenzylcarbamide** (Kühn and Riesenfeld), 1892, A., 312.

β-**Naphthylbenzylideneamine** (Claisen), 1887, A., 494.

Naphthylbenzylthiocarbamides, α- and β- (Dixon), 1891, T., 558, 559.

as-β-**Naphthylcarbamide** (Kühn and Landau), 1890, A., 634.

α-**Naphthylcarbinol** (*α-naphthabenzylic alcohol*) (Bamberger and Lodter), 1888, A., 375.

β-**Naphthylcarbinol** (Bamberger and Boekmann), 1887, A., 675.

Naphthylcarbinylamine. See Naphthylmethylamine.

α-**Naphthylcyanamide** (Tiemann), 1889, A., 1165; (Voltmer), 1891, A., 559.

α-**Naphthyldiethylamine** (Friedländer and Welmans), 1889, A., 151.

β-**Naphthyldiethylamine,** hydrogenation of (Bamberger and Williamson), 1889, A., 1000.

α-**Naphthyldiethylaminecarboxylic acid** (Friedländer and Welmans), 1889, A., 152.

α-**Naphthyldimethylamine** and its derivatives (Friedländer and Welmans), 1889, A., 150.

α-**Naphthyldimethylaminecarboxylic acid** (Friedländer and Welmans), 1889, A., 151.

Naphthyldimethylaminesulphonic acid (Friedländer and Welmans), 1889, A., 151.

Naphthyldimethylpropionic acid (Gucci and Grassi-Cristaldi), 1892, A., 871.

Naphthyl-2:5-dimethylpyrrolines, 1:α- and 1:β- (Knorr), 1887, A., 275.

1-β-**Naphthyl-2:5-dimethylpyrroline-3:4-dicarboxylic acid** (Knorr), 1885, A., 555.

1:α-**Naphthyl-2:5-dimethylpyrroline-3:4-dicarboxylic acid** (Knorr), 1887, A., 275.

Naphthyldiphenylamine (Herz), 1890, A., 1410.

Naphthyldiphenylamine-blue, constitution of (Häusdörfer), 1890, A., 1308.

β-**Naphthyldiphenylcarbamide** (Kym), 1890, A., 633.

Naphthyl-2:5-diphenylpyrrolines, 1:α- and 1:β- (Paal and Braikoff), 1890, A., 263, 264.

Naphthylene mercaptan (Ebert and Kleiner), 1891, A., 460.

"**Naphthylenes**" (Markownikoff and Ogloblin), 1884, A., 1276.

Naphthylene-αβ-benzenyldiamine (Koll), 1891, A., 1239.

Naphthylenediallylthiocarbamide (Lellmann), 1886, A., 625.

1:1′-**Naphthylenediamine** (*diamidonaphthalene*) (Hinsberg), 1889, A., 717.

1:2-**Naphthylenediamine** (Lawson), 1885, A., 1238.
  action of formic acid on (Fischer and Wreszinski), 1892, A., 1496.
  hydrogenation of (Bamberger and Schieffelin), 1889, A., 892.

1:3-**Naphthylenediamine** (Urban), 1887, A., 674.

1:4-**Naphthylenediamine** (Griess), 1883, A., 183; (Witt), 1887, A., 1048.
  hydrogenation of (Bamberger and Schieffelin), 1889, A., 892.

2:1′-**Naphthylenediamine** (Friedländer and Szymanski), 1892, A., 1234.

2:2′-**Naphthylenediamine,** preparation of (Bamberger and Schieffelin), 1889, A., 893.

2:4′-**Naphthylenediamine** (Friedländer and Szymanski), 1892, A., 1233.

Naphthylenediamines, substituted (Annaheim), 1887, A., 839.

1:2-**Naphthylenediamine-3:1′-disulphonic acid,** derivatives of (Bernthsen), 1891, A., 216.

1:2-**Naphthylenediamine-2′-, -3′- and -4′-sulphonic acids** (Witt), 1889, A., 274.

αβ-**Naphthylenedimethoxyphthalamidone** (Bistrzycki and Cybulski), 1892, A., 1249.

Naphthylenedinaphthylsulphoxide (Ekstrand), 1885, A., 170.

Naphthylenediphenyl*di*thiocarbamide (Bamberger and Schieffelin), 1889, A., 892.

1:2-**Naphthylene-ethenylamidine** and its salts (Prager), 1885, A., 1239; (Lellmann and Remy), 1886, A., 624.
  4-bromo- and bromonitro- (Prager), 1885, A., 1239.

ββ-**Naphthylene-ethenyldiamine** (Fischer and Hepp), 1887, A., 729.

Naphthylene-ethyldiamine (Kock), 1888, A., 469.

Naphthylene-ethyldiamine hydrochloride (Kock), 1888, A., 469; (Bamberger and Goldsmidt), 1891, A., 1239.

1:2-**Naphthylene-methenylamidine** and **-methylmethenylamidine** (Fischer and Wreszinski), 1892, A., 1496.
β-**Naphthylenetoluquinoxaline** (Hinsberg), 1885, A., 909.
amido- (Witt), 1886, T., 400.
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*di***Nitrallylbenzene** (Edeleanu), 1887, A., 583.
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*di***Nitr*di*amidoanisoil** (Nietzki and Kurtenacker), 1892, A., 596.
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3:4-**Nitramidobenzamide** (Grohmann), 1891, A., 305; (Thieme), 1891, A., 916.
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3:4-**Nitramidomethoxybenzene** (Scheidel), 1886, A., 1046.
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*di***Nitramidophenyl-*p*-toluidine** (Ernst), 1891, A., 300.
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o-**Nitranilidoacetic acid** (Plöchl), 1886, A., 351.
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3:4-**Nitranilidobenzanilide** (Grohmann), 1891, A., 305.
5:2-**Nitranilidobenzanilide** (Grohmann), 1892, A., 326.
m-**Nitr**-*o*- and -*p*-**anilidobenzenesulphonic acids** (Fischer), 1892, A., 332, 331.
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m-**Nitranilido**-*p*-**hydroxybenzoic acid** (Schöpff), 1890, A., 375.
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*di***Nitranisidine** (Wender), 1890, A., 752.
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*di***Nitrethoxydiphenyl** (HIRSCH), 1889, A., 511.

*di***Nitrethoxydiphenylamine**(SCHÖPFF), 1889, A., 773.

*di***Nitrethoxyethylhydroquinoline** (KOHN), 1886, T., 509.

1-Nitr-β-ethoxynaphthalene, and action of ammonia on (WITTKAMPF), 1884, A., 1036.

1′:4′-*di*Nitr-β-ethoxynaphthalene (ONUFROWICZ), 1891, A., 321.

m-**Nitrethoxyphenyl*di*bromonitroethane** (FRIEDLÄNDER and LAZARUS), 1885, A., 1138.

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p-**Nitrethylacetanilide** (NÖLTING and COLLIN), 1884, A., 1013.

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m-**Nitrethylaceto-*p*-toluidide** (NIEMENTOWSKI), 1887, A., 938.

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*di***Nitrethylenecarbamide** (FRANCHIMONT and KLOBBIE), 1888, A., 1180.

*tetra***Nitrethylenic bromide** (*dibromotetranitrethane*) (LOSANITSCH), 1883, A., 564; (VILLIERS), 1884, A., 33.

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*di***Nitrethylhydro-*p*-coumaric acid** (STOEHR), 1884, A., 1350.

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*di***Nitrethylidenephthalide** (GABRIEL), 1886, A., 620.

*tri***Nitrethyl-α- and -β-naphthols** (STAEDEL), 1883, A., 863.

p-**Nitrethylphenylnitrosamine** (MELDOLA and STREATFEILD), 1886, T., 631.

m-**Nitrethyl-*p*-toluidine** (NÖLTING and STRICKER), 1886, A., 544; (NÖLTING and ABT), 1888, A., 274.

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m-**Nitrobenzenylamidine** (Tafel and Enoch), 1890, A., 973.
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m-**Nitrobenzenylazoximebenzenyl** and its derivatives (Schöpff), 1885, A., 897, 1217.
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p-**Nitrobenzenylazoxime-ethenyl** (Weise), 1890, A., 45.
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p-**Nitrobenzophenylhydrazide** (Hausknecht), 1889, A., 507.
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p-**Nitrobenzoylacetic acid** and its derivatives (Perkin and Bellenot), 1884, A., 1023; 1885, A., 794; 1886, T., 440; P., 193.
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α-**Nitro-β-benzoylnaphthol,** molecular transformation of (Böttcher), 1883, A., 1113.
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*di*Nitro-*m*-**benzyltoluene** (Senff), 1884, A., 427.
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*di*Nitrobutane and its salts (Chancel), 1883, A., 915; 1885, A., 647.
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*di*Nitro*iso*butylaniline (Barr), 1888, A., 823.
Nitro-*tert.*-**butylbenzene** (Seńkowski), 1890, A., 1296.
m-**Nitro***iso***butylbenzene** (Gelzer), 1889, A., 43.
Nitro-*p*-*iso***butylphenol** (Gelzer), 1889, A., 43.
*tri*Nitro-*m*-*iso*butyltoluene (Baur), 1890, A., 1401; 1891, A., 1464.
*tri*Nitro*iso*butyl-*m*-xylene (Baur), 1890, A., 1402.
Nitrocampholenic acid (Kachler and Spitzer), 1883, A., 1008.
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*di*Nitrocarvacrol (Mazzara), 1891, A., 47.
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o-**Nitrocinnamoylacetone** (Fischer and Kuzel), 1883, A., 587, 588.
o-**Nitrocinnamoylacraldehyde** (Einhorn), 1884, A., 1346.
o-**Nitrocinnamoylformic acid** (v. Baeyer and Drewsen), 1883, A., 341.
*tri*Nitrocitrotrianil (Schneider), 1888, A., 465.
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o-**Nitrocoumarin** (v. Miller and Kinkelin), 1889, A., 989.
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o-**Nitrocoumarinic acid** (v. Miller and Kinkelin), 1889, A., 989.
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*tri*Nitrocresotic acid. See *tri*Nitrohydroxy-*m*-toluic acid.
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m-**Nitro**-ψ-**cumenol** (Auwers), 1886, A., 144.
2:5-*di*Nitro-ψ-cumenol (Auwers), 1885, A., 381; 1886, A., 144.
Nitro-ψ-**cumidinesulphonic acid** (Mayer), 1887, A., 953.
o-**Nitrocuminaldehyde** (*o*-*nitrocuminol*) (Einhorn and Hess), 1884, A., 1352.
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m-**Nitro**-α-**cumylacraldehyde** (v. Miller and Rohde), 1889, A., 984.
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m-**Nitro**-ψ-**cumylic nitrate** (Auwers), 1885, A., 380.
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6-**Nitro-*p*-cymene-2-sulphonic acid** and an isomeride (Errera), 1890, A., 1287, 1288; 1891, A., 1066.
2:6-*di***Nitrocymidine**, constitution of (Mazzara), 1890, A., 753.
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p-**Nitrodeoxybenzoin** (Petrenko-Kritschenko), 1892, A., 1227.
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*di***Nitro-derivatives**, reaction for (Janovsky), 1891, A., 685.
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2-**Nitro-1:4-diaceto-α-naphthylenediamide** (Kleemann), 1886, A., 472.
Nitrodiacetotolylene-*o*-diamides, *mono*- and *di*- (Bistrzycki and Ulffers), 1892, A., 1197.
3-**Nitrodiacetyl-*p*-amidophenol** (Hähle), 1891, A., 430.
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m-**Nitrodibenzamide** (Lossen), 1892, A., 52.
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*di***Nitrodibenzoyl-*p*-oxydiphenylamine** (Philip and Calm), 1885, A., 156.
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Nitrodibenzoylstyrene (Japp and Klingemann), 1890, T., 676.
m-*di***Nitrodibenzylbenzene** (Becker), 1883, A., 203.
p-*di***Nitrodibenzylbenzene** (Basler), 1884, A., 310.
p-*di***Nitrodibenzylcarbamide** (Hafner), 1889, A., 982.
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o-**Nitrodibenzylic** *mono*- and *di*-**sulphides** (Jahoda), 1890, A., 487, 488.
*di***Nitrodibenzylidene*di*thioxamide** (Ephraim), 1891, A., 831.
m-**Nitrodibenzylmethylamine** (Borgmann), 1886, A., 56.
di-*o*-**Nitrodibenzylmethylamine** (Gabriel and Jansen), 1892, A., 218.
p-*di***Nitrodibenzylthiocarbamide** (Hafner), 1890, A., 487.
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*di***Nitrodicresol** (Deninger), 1888, A., 838.
*di***Nitrodiethenyl*tetr*amidoditolyl** (Bankiewicz), 1888, A., 1184.
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*tri***Nitro-1:4-diethoxybenzene**, actions of (Nietzki and Kaufmann), 1892, A., 314.
m-**Nitrodiethylaniline** (Groll), 1886, A., 347.
p-**Nitrodiethylaniline** (Lippmann and Fleissner), 1883, A., 868, 1100.
*di***Nitrodiethylaniline** (Lippmann and Fleissner), 1884, A., 179.
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*di***Nitrodihydroxyanisoil** (Nietzki and Kurtenacker), 1892, A., 596.

*tetra***Nitro-1:3(?)-dihydroxybenzene** (Henriques), 1883, A., 327, 329.
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3-Nitro-2:4-dihydroxypyridine-5- or 6(?)-carboxylic acid (Bischoff), 1889, A., 519.
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2:5-*di*Nitro-3:6-dihydroxyquinone. See Nitranilic acid.
*di***Nitro-2:4-dihydroxytoluene** (*dinitrocresorcinol*) (v. Kostanecki), 1888, A., 264.
4-Nitro-3:6-dihydroxytoluquinone (*tolunitranilic acid*) (Kehrmann), 1888, A., 940; (Kehrmann and Brasch), 1889, A., 969.
m-**Nitro-*p*-dihydroxytriphenylmethane** (deVarda and Zenoni), 1891, A., 1346.
*di***Nitro-*p*-dihydroxytriphenylmethane** (Russanoff), 1891, A., 1235.
*tetra***Nitrodimethyl*di*amidobenzophenone** (van Romburgh), 1888, A., 1079, 1197.
*di***Nitrodimethylamidodiphenylamine** (*nitrodimethylphenylphenylenediamine*) (Lellmann and Mack), 1890, A., 1410.
*di***Nitrodimethylamidophenol** and its derivatives (Lippmann and Fleissner), 1886, A., 235.
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*tetra***Nitrodimethylazobenzene** (Mertens), 1886, A., 1022.
Nitrodimethylbenzamide (van Romburgh), 1886, A., 546.
*tetra***Nitrodimethylbenzidine** (van Romburgh), 1887, A., 245.
Nitro-2:4-dimethylbenzoic acid (Ahrens), 1892, A., 1437.
3-Nitro-2:4-dimethylbenzoic acid (Claus), 1890, A., 980.
3:5-*di*Nitro-2:4-dimethylbenzoic acid (Claus), 1890, A., 981.
*di***Nitrodimethylmalonamide** (Franchimont), 1886, A., 449.
*tetra***Nitrodimethyl*di*nitro*di*amidobenzophenone** (van Romburgh), 1888, A., 1079, 1196.
*di***Nitrodimethyloxamide** (Franchimont), 1886, A., 448.
4-Nitrodimethyl-*o*-phenylenediamine (Heim), 1888, A., 1097.
2:4:6-(?)*tri*Nitrodimethyl-*m*-phenylenediamine (van Romburgh), 1888, A., 1185.
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Nitrodimethyl-α-resorcylic acid (*nitrodimethoxybenzoic acid*) (Meyer), 1888, A., 148.
*di***Nitro-*s*-dimethylsulphonamide** (Franchimont and Klobbie), 1885, A., 969.
*di***Nitro-β-dinaphtholdisulphonic acid** (Julius), 1888, A., 161.
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*tetra***Nitro-ββ-dinaphthyl** (Staub and Smith), 1885, T., 105.
*di***Nitrodi-β-naphthyl ketone oxide** (Claus and Ruppel), 1890, A., 510.
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*hexa***Nitrodi-β-naphthylamine** (Ris), 1888, A., 58.
*tetra***Nitrodi-α- and -β- naphthylcarbamides** (Perkin), 1892, T., 467.
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*di***Nitro-αβ-dinaphthylic sulphide** (Ekstrand), 1885, A., 171.
p-**Nitro-3:3′-diphenic acid** (*nitrodiphenylcarboxylic acid*) (Strasburger), 1884, A., 329.
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1:2-*di*Nitrodiphenyl (Täuber), 1891, A., 570.
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p-*di***Nitrodiphenylacetylene** (Elbs and Bauer), 1887, A., 152.
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*di***Nitrodiphenylamine-*o*-carboxylic acid** and its derivatives (Jourdan), 1885, A., 988.
m-**Nitrodiphenylamine-*p*-carboxylic acid** (Schöpff), 1890, A., 374.
Nitrodiphenylbenzylidenemaleimidine (Cohn), 1892, A., 487.
*tri***Nitrodiphenylbenzylphosphine oxide** (Dörken), 1888, A., 833.
m-**Nitro-*s*-diphenylcarbamide** (Leuckart), 1890, A., 760.
p-**Nitro-*s*-diphenylcarbamide** (Goldschmidt and Molinari), 1888, A., 1285; (Leuckart), 1890, A., 760.
m-*di***Nitro-*s*-diphenylcarbamide** (Losanitsch), 1883, A., 583.

***p-di*Nitrodiphenyldibutinyl ketone** (Einhorn and Gehrenbeck), 1890, A., 162.
***m-di*Nitrodiphenyldisulphine** (Ekbom), 1891, A., 567.
***p-di*Nitro-*s*-diphenylethane**, preparation of (Roser), 1887, A., 836.
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***α-di*Nitro-*s*-diphenylhydrazine** (Willgerodt and Ferko), 1888, A., 829; (Willgerodt and Hermann), 1889, A., 1160; 1890, A., 1259.
***tri*Nitro-*s*-diphenylhydrazine** (Fischer), 1890, A., 40.
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***m*-Nitrodiphenylizindihydroxytartaric acid** (Bischler and Brodsky), 1890, A., 151.
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***m*-Nitro-*s*-diphenylmethylcarbamide** (Lellmann and Benz), 1891, A., 1215.
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Nitro-1:5-diphenyl-3-methylpyrazoles, *o-* and *p-* (Knorr and Jödicke), 1885, A., 1247, 1248.
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Nitrodiphenyl-*αβ*-naphthatriazines, *o-*, *m-* and *p-* (Meldola and Forster), 1891, T., 681.
***o*-Nitrodiphenylnitrosamine** (Fischer), 1892, A., 332.
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***di*Nitrodiphenylphosphinic acid** (Dörken), 1888, A., 833.
***di*Nitrodiphenylphosphonic acid** (Rapp), 1884, A., 1337.
***p-di*Nitrodiphenylpiperazine** (Schmidt and Wichmann), 1892, A., 210.
***di*Nitro-2:3-diphenylpyrazine** (Mason), 1889, T., 101.
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***m*-Nitrodiphenylsemithiocarbazide** (Bischler and Brodsky), 1890, A., 151.
***di*Nitrodiphenylsulphoxide** (Colby and McLoughlin), 1887, A., 372.
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Nitrodiphthalylethanes, *mono-* and *di-* (Gabriel), 1886, A., 620.
***di*Nitrodipiperonylideneacetone** (Haber), 1891, A., 705.
***di*Nitrodipropylaniline** (van Romburgh), 1889, A., 971.
***di*Nitro-*p*-dipropylbenzene** (Körner), 1883, A., 321.
***di*Nitrodiresorcinol** (Hazura), 1883, A., 1114.
***p*-Nitrodistyryl ketone** (v. Baeyer and Becker), 1883, A., 1120.
***di-o*-Nitrodistyrylvinyl ketone** (Diehl and Einhorn), 1885, A., 1222.
***di*Nitro-*o*-ditolyl**, preparation of (Täuber and Loewenherz), 1891, A., 1491.
***di*Nitroditolyl ketone** (Lange and Zufall), 1892, A., 1460.
***di*Nitroditolylethylenediamine** (Gattermann and Hager), 1884, A., 1142.
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  - critical temperature and pressure of; relation between its boiling point and the pressure (Olszewski), 1884, A., 1257,
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  - density of liquefied (Olszewski), 1887, A., 694.
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*di***Nitrohydroxydiphenylamine** [m.p. 190°] (Nietzki and Schündelen), 1892, A., 310.
*di***Nitro**-*o*-**hydroxydiphenylamine** (Schöpff), 1889, A., 772.
Nitrohydroxydiphenylbenzyl-maleide and **-maleimidine** (Cohn), 1892, A., 485, 486.
*di***Nitrohydroxyethoxydiphenylamine** (Nietzki and Kaufmann), 1892, A., 314.
Nitro-ω-**hydroxyethylpiperonylcarboxylic anhydride** (Perkin), 1890, T., 1027.
Nitro-4′-hydroxy-2′-methylquinazoline (Dehoff), 1890, A., 802; 1891, A., 84; (Thieme), 1891, A., 917.
1-**Nitro-3-hydroxy-4-methylquinoline** (Nölting and Trautmann), 1891, A., 326.
4-**Nitro-1-hydroxy-2-methylquinoline** (Nölting and Trautmann), 1891, A., 326; 1892, A., 727.
Nitrohydroxymethylquinolines 2:1:4- and 3:4:1- (Nölting and Trautmann), 1892, A., 727, 728, 729.
3:2-**Nitrohydroxy**-α-**naphthaquinone derivatives** (Kehrmann and Weichardt), 1889, A., 1197.
Nitro-1-hydroxy-α-**naphthoic acid** (Ekstrand), 1889, A., 153.
Nitro-β-**hydroxyphenylacrylic acids**, *o*- and *p*- (Lipp), 1887, A., 142.
Nitro-β-**hydroxyphenylpropionic acid** (*nitrophenyl-β-lactic acid*). See β-Hydroxyphenylpropionic acid.
Nitro-β-**hydroxyphenylpropionyl methyl ketone**, *o*- and *p*- (v. Baeyer and Drewsen), 1883, A., 341; (v. Baeyer and Becker), 1883, A., 1120.
Nitrohydroxyphenylpyrotartaric acids, *m*- and *p*- (*nitrophenylitamalic acids*), and barium salts of (Salomonson), 1888, A., 480.
*di***Nitrohydroxyphthalic acid** (Bernthsen and Semper), 1885, A., 548.
2-**Nitro-4-hydroxy***iso***propylbenzoic acid** (Widman), 1886, A., 466.
3-**Nitro-4-hydroxy***iso***propylbenzoic acid** and its derivatives (Widman), 1883, A., 330; 1884, A., 316.
Nitrohydroxypropylphthalimide (Neumann), 1890, A., 890.
Nitrohydroxyquinoline. See Hydroxyquinoline.
Nitro-1-hydroxyquinolinecarboxylic acid (Schmitt and Engelmann), 1888, A., 66.
*di***Nitrohydroxyquinone**, preparation of (Nietzki), 1884, A., 58.
5-**Nitro**-*o*-**hydroxytoluic acid** (Hönig), 1886, A., 242.
*tri***Nitrohydroxy**-*m*-**toluic acid** (*nitrococcusic acid; trinitrocresotic acid*), synthesis of (v. Kostanecki and Niementowski), 1885, A., 531.
p-**Nitrohydroxyvinylphenylpropionic acid** (Einhorn and Gehrenbeck), 1889, A., 397.
Nitro*di***imido-quinol** and **-resorcinol** (Nietzki and Schmidt), 1889, A., 968, 969.
Nitroindazine (Witt, Nölting and Grandmougin), 1891, A., 312.
Nitroindoles, derivatives of (Zatti), 1890, A., 897.
Nitro-keto-compounds, formation of (Armstrong and Rossiter), 1891, P., 89.
Nitro-α_1-**keto**-γ_1-**methyl**-β_1-**ethyljuloline** (Kayser and Reissert), 1892 A., 883.

Nitroketones, preparation of (Lange and Zufall), 1892, A., 1459.
ψ-**Nitroles**, conversion of ketoximes into (Scholl), 1888, A., 443.
  constitution of (Meyer), 1888, A., 702.
o-**Nitroleucomalachite-green** (*o-nitrotetramethyldiamidotriphenylmethane*) (Fischer and Schmidt), 1884, A., 1315.
Nitrolimettin (Tilden), 1892, T., 350.
Nitrolic acids (Janovsky), 1885, A., 1131.
Nitroltrimetaphosphoric acid (Mente), 1889, A., 211.
o-**Nitromalachite-green** (Fischer and Schmidt), 1884, A., 1315.
Nitromandelic acid. See Mandelic acid.
o-**Nitromeconineacetic acid** (Liebermann and Kleemann), 1887, A., 48.
Nitromesitylacetic acid and its salts (Wispek), 1883, A., 1096.
*di***Nitromesitylacetic acid** (Dittrich and Meyer), 1891, A., 1224.
Nitromesitylene, oxidation of (Emerson), 1887, A., 132.
*di***Nitromesitylene methylnitramide** (Klobbie), 1888, A., 467.
*di***Nitromesitylglyoxylic acid** (Dittrich and Meyer), 1891, A., 1224.
Nitro-metals (Sabatier and Senderens), 1892, A., 1390.
Nitrometer (Blunt), 1887, A., 998.
  improved form of (Lunge), 1888, A., 526.
  reduction of ferric nitrate in (Bayley), 1886, A., 1072.
  uses of (Allen), 1886, A., 278; (Lunge), 1886, A., 391.
  supposed error in the use of (Lunge), 1886, A., 391.
  use of, in the estimation of potassium permanganate, zinc-dust, and reduced iron powder (Lunge), 1885, A., 1162.
  modification of, for use as a ureometer and other purposes (Lunge), 1885, A., 1267.
Nitromethane. See Methane.
Nitromethaneazobenzoic acid (Griess), 1885, A., 788.
Nitromethoxybenzaldehyde. See Methoxybenzaldehyde.
Nitro-*m*-methoxybenzoic acids, *o*- and *m*- (Rieche), 1889, A., 1169, 1170.
2-**Nitro-6-methoxybenzonitrile** (Lobry de Bruyn), 1885, A., 657.
Nitromethoxycinnamaldehyde (v. Miller and Kinkelin), 1889, A., 990.
Nitromethoxycinnamic acid (*nitromethylcoumaric acid*). See Methoxycinnamic acid.
m-**Nitromethoxy-ψ-cumene** (Auwers), 1886, A., 144.
2-**Nitro-5-methoxy-β-hydroxyphenylpropionamide** (Eichengrün and Einhorn), 1890, A., 1128.
2-**Nitro-5-methoxy-β-hydroxyphenylpropionic acid** (Eichengrün and Einhorn), 1890, A., 1127; 1891, A., 1100.
2-**Nitro-5-methoxyphenyl-β-bromopropionic acid** (Eichengrün and Einhorn), 1890, A., 1127.
m-**Nitro-*p*-methoxyphenyl*di*bromopropionic acid** (Einhorn and Grabfield), 1888, A., 478.
m-**Nitro-*p*-methoxyphenylethylene** (Einhorn and Grabfield), 1888, A., 477.
2-**Nitro-3-methoxy-2′-phenylquinoline** and its derivatives (v. Miller and Kinkelin), 1887, A., 978.
m-**Nitro-*p*-methylaceto-*p*-toluidide** (Niementowski), 1887, A., 937.
p-**Nitromethylamidoazobenzene.** See Benzeneazomethylaniline, nitro-.
Nitromethylamidobenzoic acids (Thieme), 1891, A., 916, 917.
5-**Nitro-2-methylamidobenzomethylamide** (Thieme), 1891, A., 917.
2:4:6-*tri***Nitromethylamidomethylnitramidobenzene** (van Romburgh), 1889, A., 1154.
Nitromethylaniline. See Methylaniline.
*tri***Nitromethyl-*o*-anisidine** (Grimaux and Lefèvre), 1891, A., 1032.
Nitro-β-methylanthraquinone (Roemer and Link), 1883, A., 1138.
Nitromethyl*iso*benzaldoxime, *m*- and *p*- (Goldschmidt), 1890, A., 1262; (Goldschmidt and Kjellin), 1891, A., 1477.
Nitromethylbenzamide (van Romburgh), 1886, A., 546.
Nitromethylcarbostyril (Feer and Koenigs), 1885, A., 1235.
Nitromethylcoumaraldehyde (v. Miller and Kinkelin), 1889, A., 990.
Nitromethylcoumaric acid (*nitromethoxycinnamic acid*). See Methylcoumaric acid.
Nitromethylenephthalide (Zincke and Latten), 1892, A., 1231.
Nitro-*o*-methylethylbenzenes, *mono*- and *di*- (Claus and Pieszczek), 1887, A., 240.
m-**Nitromethyl-formanilide** and -*iso*-**formanilide** (Comstock and Wheeler), 1892, A., 706.

Nitromethylhydantoin (Franchimont and Klobbie), 1888, A., 1180; 1889, A., 1143.
action of water on (Franchimont and Klobbie), 1889, A., 125.
*di***Nitromethylhydro-*p*-coumaric acid** (Stoehr), 1884, A., 1350.
*di***Nitro-2′-methylindole** (Zatti), 1890, A., 897.
Nitro-α-methylnaphthalene (Scherler), 1892, A., 494.
*tri***Nitromethyl-*α*- and -*β*-naphthols** (Staedel), 1883, A., 863.
Nitromethylpyrocatechol derivatives (Cousin), 1892, A., 1443.
*di***Nitromethylquinol** (Wender), 1890, A., 752.
Nitromethylquinoline. See Methylquinoline.
4-Nitromethylquinolone (Decker), 1892, A., 880.
*tri***Nitromethyl-*p*-toluidine** (Norton and Livermore), 1887, A., 1038.
Nitro-β-methylumbelliferone (v. Pechmann and Cohen), 1884, A., 1332.
Nitromethyluracil (Behrend), 1887, A., 919; (Lehmann), 1890, A., 32.
Nitromolybdic acid solution, concentrated, preparation of (Guyard), 1884, A., 638.
Nitronaphthalene. See Naphthalene.
Nitronaphthalene-1:1′-dicarboxylic acid and **anhydride** (Quincke), 1888, A., 844.
Nitronaphthalene-2:2′-disulphonic acid and its chloride (Alén), 1883, A., 596.
*di***Nitronaphthalene-3:3′-disulphonic chloride** (Alén), 1883, A., 596.
1:3′-*α*-**Nitronaphthalenesulphonamide,** action of hydriodic acid on (Ekbom), 1891, A., 573.
1:4′-**Nitronaphthalenesulphonamide,** action of hydriodic acid on (Ekbom), 1890, A., 994.
Nitronaphthalenesulphonic acid. See Naphthalenesulphonic acid.
Nitro-α-naphthamide (Ekstrand), 1886, A., 948.
Nitro-β-naphthaquinhydrone (Groves), 1884, T., 300.
Nitro-β-naphthaquinol (Groves), 1884, T., 299; (Zaertling), 1890, A., 509.
Nitronaphthaquinone. See Naphthaquinone.
Nitro-β-naphthaquinoneanilide (Brauns), 1884, A., 1038; (Korn), 1884, A., 1186.
Nitro-β-naphthaquinone-*o*- and -*p*-toluidides (Brauns), 1884, A., 1038.
Nitronaphthoic acid. See Naphthoic acid.
Nitronaphthol. See Naphthol.
Nitronaphtholactone (Ekstrand), 1889, A., 153.
4′-**Nitro-*α*-naphthonitrile** and **nitro-*β*-naphthonitrile** (Graeff), 1884, A., 80.
m-**Nitro-*p*-*α*- and -*β*-naphthylamidobenzoic acids** (Heidensleben), 1891, A., 307.
Nitronaphthylamine. See Naphthylamine.
4′-**Nitro-*α*-naphthylamine-4-sulphonic acid** (Nietzki and Zübelen), 1889, A., 514.
α-**Nitro-*β*-naphthylic** benzoate and acetate, reduction of (Böttcher), 1885, A., 659.
benzoate and acetate, molecular transformation of (Böttcher), 1883, A., 1113.
*di***Nitronaphthylic sulphide** (Ekstrand), 1885, A., 171.
Nitronates (Divers), 1883, T., 455, 466.
Nitronitrosoanthrone (Perkin), 1891, T., 639.
action of sodium sulphide on (Perkin), 1891, T., 640.
Nitronitrosoazobenzene. See Azobenzene.
Nitronitrosobenzeneazo-. See Benzeneazo-.
p-**Nitronitroso-*β*-benzylhydroxylamine** (Behrend and König), 1891, A., 1035.
*tetra***Nitronitrosobisazobenzene-*p*-chlorophenylhydrazine** (Willgerodt), 1890, A., 1119; (Willgerodt and Böhm), 1891, A., 907.
o-**Nitro-*ω*-nitroso-*p*-diazotoluene chloride.** See Methyl-*o*-nitro-*p*-diazobenzene chloride, nitroso-.
di-p-**Nitro*di*nitrosoditoluene** (*bis-p-nitronitrosylbenzyl*) (Behrend and König), 1891, A., 1035.
o-**Nitronitrosoethylaniline** (Hempel), 1889, A., 600; 1890, A., 612.
o-**Nitronitrosomethylaniline** (Hempel), 1890, A., 612.
Nitro*di*nitrosophenol (Willgerodt), 1891, A., 688; 1892, A., 594.
Nitro*di*nitrosophenol-acenaphthene and **-anthracene** (Willgerodt), 1891, A., 689.
2:4-**Nitronitrosoresorcinol** (De la Harpe and Reverdin), 1888, A., 679; 1889, A., 41.
Nitronitroso-*m*-xylenecarboxylic acid (Claus), 1890, A., 980.

Nitrononaphthene (KONOWALOFF), 1892, A., 443.
Nitro-octylbenzenes, *o*-, *m*- and *p*- (AHRENS), 1887, A., 133.
*di***Nitro-octylbenzene** (AHRENS), 1887, A., 133.
Nitro-opianic acid, behaviour of, with phenylhydrazine (LIEBERMANN), 1886, A., 550.
  reduction of (KLEEMANN), 1887, A., 584.
Nitro-oreosolon (JASSOY), 1890, A., 1154.
1-**Nitro-oxalo-β-naphthalide,** bis- (PERKIN), 1892, T., 466.
m-**Nitro-oxalo-*p*-toluidide,** bis- (HINSBERG), 1883, A., 323.
5-**Nitro-oxalo-*o*-toluidide,** bis- (PERKIN), 1892, T., 463.
3:5-*di***Nitro-oxalo-*o*-** and **-*p*-toluidides,** bis- (MIXTER and KLEEBERG), 1889, A., 771; (PERKIN), 1892, T., 464, 465.
*tri***Nitro-oxanilanilide** (MIXTER and WALTHER), 1888, A., 142.
Nitro-oxanilic acid. See Oxanilic acid.
Nitro-oxanilide. See Oxanilide.
Nitro-oxycamphor (KACHLER and SPITZER), 1883, A., 215.
4-**Nitro-2′-oxy-3:1′-dimethylquinoline** (DECKER), 1892, A., 880.
m-**Nitro-4′-oxy-2′-methylquinazoline** (DEHOFF), 1891, A., 84; (THIEME), 1891, A., 917.
Nitro-oxyquinone carbonate (LÖWENBERG), 1886, A., 789.
Nitroparaffins, constitution of (KISSEL), 1885, A , 364.
Nitropentane (BEWAD), 1889, A., 1127.
Nitroperseitol (MÜNTZ and MARCANO), 1884, A., 1285.
*di***Nitro-*p*-phenacetide** (WENDER), 1890, A., 751.
o-**Nitrophenacetin** (AUTENRIETH and HINSBERG), 1892, A., 160.
Nitrophenaceturic acid (HOTTER), 1888, A., 1299.
m-**Nitrophenacylphthalimide** (SCHMIDT), 1890, A., 372.
m-**Nitrophenacyl-*p*-toluidine** (LELLMANN and DONNER), 1890, A., 525.
Nitrophenanthraquinone (LACHOWICZ), 1884, A., 82.
2:4-*di***Nitrophenazoxine** (TURPIN), 1891, T., 724.
o-**Nitro-*p*-phenetidine** (AUTENRIETH and HINSBERG), 1892, A., 160.
2:6-*di***Nitro-*p*-phenetidine** (WENDER), 1890, A., 751.
Nitrophenetoil. See Phenetoil.
Nitrophenol. See Phenol.
2:4:6-*tri***Nitrophenol.** See Picric acid.
*di***Nitrophenolsulphonic acid,** preparation of (BEYER and KEGEL), 1885, A., 269.
Nitrophenophenanthrazine (HEIM), 1888, A., 1097.
p-**Nitrophenoxyacetophenone** (MÖHLAU), 1883, A., 332.
p-**Nitrophenyl mercaptan** (WILLGERODT), 1885, A., 519; (LEUCKART), 1890, A., 604.
*di***Nitrophenyl mercaptan** (AUSTEN and SMITH), 1886, A., 693.
  ethers of (WILLGERODT), 1885, A., 519.
m-**Nitrophenyl methyl ketoxime** (GABRIEL), 1883, A., 582.
Nitrophenylacetamide, *m*- and *p*- (PURGOTTI), 1891, A., 562.
m-**Nitrophenylacetic acid** (GABRIEL and BORGMANN), 1883, A., 1121.
o:*p*-*di***Nitrophenylacetic acid** (HECKMANN), 1884, A., 178.
Nitrophenylacetonitrile. See Phenylacetonitrile.
Nitrophenyl-β-alanine. See Nitr-β-anilidopropionic acid.
Nitrophenylamido-. See also Nitranilido-.
Nitrophenyl*di*-*p*-amidophenyl*iso*butylmethanes, *m*- and *p*- (BISCHLER), 1889, A., 133.
Nitrophenyl-β-amidopropionic acid. See Nitr-β-amidopropionic acid.
m-**Nitrophenyl*di*-*p*-amidotolylmethanes,** α- and β- (BISCHLER), 1889, A., 133.
p-**Nitrophenyl*di*-*p*-amidotolylmethanes,** α- and β- (BISCHLER), 1888, A., 287.
Nitrophenyl*di*amido-*m*-xylylmethanes, *m*- and *p*- (BISCHLER), 1889, A., 134.
*tetra***Nitrophenylazimidobenzene** (WILLGERODT), 1892, A., 1454.
*di***Nitrophenylazimidotolylamine** (ERNST), 1891, A., 300.
o-**Nitrophenylazoacetoacetic acid,** and its derivatives (BAMBERGER), 1885, A., 157.
o-**Nitrophenylazoacetophenone** (BAMBERGER and CALMAN), 1886, A., 62.
di-*o*-**Nitrophenylbenzidine** (SCHÖPFF), 1889, A., 773.
Nitrophenylbenzyl oxides, *o*- and *p*- (KUMPF), 1884, A., 1005.
m-**Nitrophenylbenzylcarbamide** (KÜHN and RIESENFELD), 1892, A., 312.
o-**Nitrophenylbenzylhydrazine** (PAAL and BODEWIG), 1892, A., 1455.
o-**Nitrophenylbenzylidenehydrazine** (BISCHLER), 1890, A., 148.

m-**Nitrophenylbenzylidenehydrazine** (Bischler and Brodsky), 1890, A., 150.

p-**Nitrophenyl-γδ-*di*bromethyl-β-bromacrylic acid** (Einhorn and Gehrenbeck), 1889, A., 396; 1890, A., 162.

p-**Nitrophenylbromethyllactic acid**, lactone of (Einhorn and Gehrenbeck), 1889, A., 397.

p-**Nitrophenyl*di*bromobutinenecarboxylic acid** (Einhorn and Gehrenbeck), 1889, A., 396.

*o:p-di***Nitrophenyl-*p*-bromophenylhydrazine** (Willgerodt and Ellon), 1891, A., 1362.

o-**Nitrophenyl-β-bromopropionic acid** and its derivatives (Einhorn), 1884, A., 65.

m-**Nitrophenyl-β-bromopropionic acid** (Prausnitz), 1884, A., 1175.

Nitrophenyl-β-bromo*iso*succinic acids, *o*- and *p*- (Stuart), 1886, T., 363, 362.

Nitrophenyl*di*bromo*iso*succinic acids, *m*- and *p*- (Stuart), 1886, T., 361.

Nitrophenylbutinene-ω-carboxylic acids (Einhorn and Gehrenbeck), 1889, A., 271, 396; 1890, A., 162.

p-**Nitrophenyl*iso*butyric acid** (Edeleanu), 1888, T., 558.

*o:p-di***Nitrophenyl-*m*-chlorophenylhydrazine** (Willgerodt and Mühe), 1892, A., 454.

*o:p-di***Nitrophenyl-*p*-chlorophenylhydrazine** (Willgerodt), 1890, A., 1119; (Willgerodt and Böhm), 1891, A., 906.

o-**Nitrophenylcinnamic acid** (Oglialoro-Todaro and Rosini), 1891, A., 214.

Nitrophenylcitraconazide (Michael), 1886, A., 699.

*o-p-di***Nitrophenylconiine** (Lellmann and Just), 1891, A., 1245.

m-**Nitrophenylcrotonaldehyde** (v. Miller and Kinkelin), 1886, A., 560.
  base from (v. Miller and Kinkelin), 1886, A., 701.
  product of the reduction of (v. Miller and Kinkelin), 1886, A., 799.

m-**Nitrophenylcrotonic acid** (v. Miller and Rohde), 1890, A., 1140.

p-**Nitrophenyldehydrohexonecarboxylic acid** (Perkin), 1887, T., 736.

β-*p*-**Nitrophenyldi-*p*-acetamidoditolylmethane** (Bischler), 1889, A., 132.

m-**Nitrophenyldianethoilmethane** (de Varda), 1891, A., 1347.

m-**Nitrophenyldi-*o*-cresolmethane** (Siboni), 1892, A., 621.

Nitrophenyldihydroxyphenylmethanedicarboxylic acids, *o*-, *m*- and *p*- (de Varda), 1892, A., 621.

m-**Nitrophenyl-diorcinolmethane** and **-diphloroglucinolmethane** (Bertoni), 1891, A., 1378.

Nitrophenyldipiperidyls, *p-mono*- and *o-p-di*- (Lellmann and Just), 1891, A., 1245.

p-**Nitrophenyldiquinolylmethane** (Einhorn), 1886, A., 720.

m-**Nitrophenyldiresorcinylmethane** (de Varda and Zenoni), 1891, A., 1346.

*di***Nitrophenyldithienyl** (Renard), 1890, A., 1421.

m-**Nitrophenylditolylmethane** (Tschacher), 1887, A., 441; 1888, A., 373.

*di***Nitro-*m*-phenylenediamine** [m.p. 250°] (Barr), 1888, A., 823.

*di***Nitro-*m*-phenylenediamine** [m.p. 300°] (Nietzki and Hagenbach), 1887, A., 477.

*tri***Nitro-*m*-phenylenediamine** (Nölting and Collin), 1884, A., 1004; (Barr), 1888, A., 823.

*tri***Nitro-*m*-phenylenedimethyldinitramine** (van Romburgh), 1888, A., 1079, 1185.

Nitrophenylene-ethenylamidine (Heim), 1888, A., 1097.

*di***Nitrophenylenehydroxylamine** (Willgerodt), 1892, A., 594.

Nitrophenylene-β-naphthylethenyldiamine (Heim), 1888, A., 488.

o-**Nitrophenylethylic salicylate** (*salicylethylene nitrophenol ether*) (Wagner), 1884, A., 436.

Nitrophenylethylnitrosamine (Meldola and Streatfeild), 1886, T., 631.

Nitrophenylethylurethane (Steudemann), 1883, A., 802.

α-*p*-**Nitrophenylfurfuracrylonitrile** (Freund and Immerwahr), 1890, A., 1408.

Nitrophenylglycidic acid, *o*- and *p*- (Lipp), 1887, A., 142.

Nitrophenylglycollic acid. See Mandelic acid, nitro-.

Nitrophenylglyoxylic hydrazones, *o*- and *m*- (Fehrlin), 1890, A., 1117.

Nitrophenylhydrazine. See Phenylhydrazine.

5-**Nitrophenylhydrazine-*o*-sulphonic acid** (Limpricht), 1885, A., 1216.

o-**Nitrophenylhydrazine-*p*-sulphonic acid** (Nietzki and Lerch), 1889, A., 144; (Lerch), 1889, A., 881.

4:6-*di***Nitrophenyl-1:2-hydroxylamine** (Willgerodt), 1891, A., 688; 1892, A., 594.

o-**Nitrophenylic benzoate**, reduction of (Böttcher), 1885, A., 658.
Nitrophenylic benzoates (Neumann), 1886, A., 350, 939; 1887, A., 254.
di-**Nitrophenylic carbonate** (Löwenberg), 1886, A., 789.
tri-p-**Nitrophenylic cyanurate** (Otto), 1887, A., 1033.
o-**Nitrophenylic diphenylcarbamate** (Lellmann and Bonhöffer), 1887, A., 936.
Nitrophenylic diphenylcarbamates (Lellmann and Benz), 1891, A., 1215.
o-**Nitrophenylic ethylic carbonate** (Bender), 1887, A., 37.
Nitrophenylic *ortho***formate**, tribasic (Weddige), 1883, A., 340.
Nitrophenylic nitrobenzoates (Neumann), 1886, A., 350, 939; 1887, A., 254.
Nitrophenylic oxides, *o*- and *p*-, of *di*nitrophenol and of picric acid (Willgerodt and Huetlin), 1884, A., 1328.
Nitrophenylic phenylcarbamate (Gumpert), 1886, A., 342.
Nitrophenylic phenylmethylcarbamates (Lellmann and Benz), 1891, A., 1214.
p-**Nitrophenylic phosphate** (Rapp), 1884, A., 1337.
di-**Nitrophenylic sulphide** (*tetranitrodiphenylic sulphide*) (Austen and Smith), 1886, A., 693.
m-**Nitrophenylic** *di***sulphide** (Leuckart), 1890, A., 604.
p-**Nitrophenylic** *di***sulphide** (Willgerodt), 1885, A., 519.
α-*di***Nitrophenylic thiobenzoate** (Willgerodt), 1885, A., 519.
*di***Nitrophenylic thiocyanate** (Austen and Smith), 1886, A., 693.
Nitro-1′-phenylindazine-3′-carboxylic acid, action of stannous chloride on (Schulhöfer), 1891, A., 1231.
Nitro-1′-phenyl-ψ-indazine-3′-carboxylic acid (Meyer), 1889, A., 517.
m-**Nitrophenylizinedihydroxytartaric acid** (Bischler and Brodsky), 1890, A., 151.
Nitrophenyl-α-lactic acid, nitrate of (Erlenmeyer and Lipp), 1883, A., 993.
Nitrophenyl-β-lactic acid. See β-Hydroxyphenylpropionic acid.
Nitro-β-phenyllactic methyl ketones. See Nitro-β-hydroxypropionyl methyl ketone.
o-**Nitrophenylmethaneazobenzene** (Paal and Bodewig), 1892, A., 1456.
az-p-**Nitrophenyl-*ald*-methylnaphthatriazine** (Meldola and Forster), 1891, T., 697, 712.
2:3:4:6-*tetra***Nitrophenylmethylnitramine**, and its conversion into *m*-phenylenediamine derivatives (van Romburgh), 1889, A., 1154.
p-**Nitrophenylmethylnitrosamine** (Fischer and Hepp), 1887, A., 244; (Meldola and Salmon), 1888, T., 775.
μ-*m*-**Nitrophenyl-β-methyloxazoline** (Elfeldt), 1892, A., 214.
*o:p-di***Nitrophenyl-α-methylpiperidine** (Lellmann and Just), 1891, A., 1245.
Nitrophenyl-β-methylpiperidine, *p-mono-* and *o:p-di-* (Lellmann and Büttner), 1890, A., 1003.
4-Nitro-1-phenyl-3-methylpyrazolone (Knorr), 1884, A., 302, 1153, 1378; 1887, A., 602; (Knorr and Duden), 1892, A., 731.
m-**Nitro-2′-phenyl-3′-methylquinoline** (v. Miller and Kinkelin), 1886, A., 561.
2:4-*di***Nitrophenyl-β-naphthol** (Ernst), 1891, A., 300.
2:4-*di***Nitrophenyl-α-naphthylamine** (Heim), 1888, A., 488, 1096.
2:4-*di***Nitrophenyl-β-naphthylamine** (Heim), 1888, A., 488; (Ernst), 1891, A., 300.
*o:p-di***Nitrophenyl-α- and -β-naphthylhydrazines** (Willgerodt and Schulz), 1891, A., 572.
Nitrophenylnitrobenzenesulphazides, *m*- and *p*- (Limpricht), 1887, A., 723.
p-**Nitrophenyl-*o:p-di*nitrophenylcarbinyl cyanide** (v. Richter), 1888, A., 1186.
Nitrophenyl-*o*- and -*p*-nitrophenyl oxides, *di*- and *tri*- (Willgerodt and Huetlin), 1884, A., 1328.
Nitrophenyl-*ald-m*- and -*p*-nitrophenylnaphthatriazines, *az-p*- and *m*- (Meldola and Forster), 1891, T., 693, 694.
p-**Nitrophenylnitropropionic acid**, derivatives of (Friedländer and Mähly), 1885, A., 1137.
m-**Nitrophenyl-*o*-nitro-*p*-tolylthiocarbamide** (Steudemann), 1884, A., 307.
Nitro-*n*-phenylosotriazolecarboxylic acid (Baltzer and v. Pechmann), 1891, A., 1116.
μ-*m*-**Nitrophenyloxazoline** (Elfeldt), 1892, A., 213.
Nitro-β-phenyloxyacrylic acids. See Nitrophenylglycidic acids.
Nitrophenylparaconic acids (Salomonson), 1885, A., 1224; 1888, A., 480.
μ-*m*-**Nitrophenylpentoxazoline** (Elfeldt), 1892, A., 214.
m-**Nitrophenylphenacyl oxide** (Lellmann and Donner), 1890, A., 523.

Nitrophenyl-*ald*phenylnaphthatriazines. See Nitrodiphenylnaphthatriazine.

p-**Nitrophenylpiperazine** (Schmidt and Wichmann), 1892, A., 210.

Nitrophenylpropylamines, *di-* and *tri-* (van Romburgh), 1886, A., 455.

*di***Nitrophenylpropylene.** See *di*Nitrallylbenzene.

*tri***Nitrophenylpropylnitramine** (van Romburgh), 1886, A., 455.

m-**Nitro-2′-phenylquinoline** (v. Miller and Kinkelin), 1885, A., 1144.

*di***Nitrophenylrosaniline** (Nölting), 1883, A., 54.

*di***Nitrophenylsalicylic acid** (Arbenz), 1890, A., 893.

m-**Nitrophenylsantoninmethane** (Bertoni), 1892, A., 622.

m-**Nitro-2′-phenyltetrahydroquinoline** (v. Miller and Kinkelin), 1885, A., 1145.

o-**Nitrophenyltetra-*p*-hydroxydiphenylmethane** (Siboni), 1892, A., 621.

p-**Nitrophenyltetra-*m*-hydroxydiphenylmethane** (Siboni), 1892, A., 621.

Nitrophenyltetra-*p*-hydroxydiphenylmethanes, *m-* and *p-* (Bertoni and Zenoni), 1892, A., 620.

Nitrophenyltetrazolecarboxylic acid (Bladin), 1892, A., 1009.

m-**Nitrophenylthiocarbimide** and its derivatives (Steudemann), 1883, A., 801; 1884, A., 306.

Nitrophenylthiourethane (Losanitsch), 1883, A., 582.

o-**Nitrophenyl-*p*-toluidine** (Schöpff), 1890, A., 1113.

*tri***Nitrophenyltoluidine.** See *tri*Nitranilidotoluene.

Nitrophenyl-*p*-tolylthiocarbamides, *o-* and *m-* (Steudemann), 1884, A., 307.

Nitrophenyltriazolecarboxylic acid (Bladin), 1892, A., 735.

m-**Nitrophenyltrimethylammonium hydroxide, bromide** and *m*-**nitrophenoxide** (Staedel and Bauer), 1886, A., 941.

p-**Nitrophenylurethane** and its derivatives (Hager), 1885, A., 149.

*o:p-di***Nitrophenylurethane** (Hager), 1885, A., 150; (van Romburgh), 1892, A., 712.

p-**Nitrophenylvaleric acid** (Lellmann and Schleich), 1887, A., 490.

*tri***Nitrophloroglucinol** (Benedikt and Hazura), 1885, A., 554.

*di***Nitrophthalic acids,** 5:3- and 6:3- (Merz and Weith), 1883, A., 344.

4-**Nitro*iso*phthalic acid** (Claus and Wyndham), 1889, A., 142; (Noyes), 1889, A., 395.

*di***Nitro*iso*phthalic acid** (Claus and Wyndham), 1889, A., 142.

Nitrophthalo-*m*-*iso*cymidide (Kelbe and Warth), 1884, A., 47.

Nitropiperidine (Franchimont and Klobbie), 1889, A., 1145.

o-**Nitropiperonalphenylhydrazone** (Haber), 1891, A., 706.

6-**Nitropiperonylacrylic acid** and its salts (Perkin), 1891, T., 153.

2-**Nitropiperonylnitrile** (Haber), 1891, A., 706.

o-**Nitropiperonyvinyl methyl ketone** (Haber), 1891, A., 705.

Nitropropanes. See Propane.

*di***Nitropropane-*p*-bisazoanisoil** (Keppler and Meyer), 1892, A., 1062.

*di***Nitropropanebisazo-benzene** and **-toluene** (Keppler and Meyer), 1892, A., 1062.

Nitropropenylbenzoic acid, salts of (Widman), 1884, A., 317.

o-**Nitropropionanilide** (Smith), 1885, A., 524.

m-**Nitropropylbenzoic acid.** See *n*-Cuminic acid, nitro-.

Nitro*iso*propylcinnamic acid. See Cumylacrylic acid, nitro-.

Nitropropylene (Meyer), 1892, A., 575; (Askenasy and Meyer), 1892, A., 1062.

Nitropropylene-*p*-azoanisoil, nitropropyleneazobenzene, nitropropylene-*m*-azobenzoic acid, nitropropyleneazo-*m*-bromobenzene, nitropropyleneazo-ψ-cumene, nitropropylene-*p*-azophenetoil, and **nitropropylene-*o*-** and **-*p*-azotoluenes** (Askenasy and Meyer), 1892, A., 1063, 1064.

Nitropropyleneazobenzene (Meyer), 1892, A., 575.

*di***Nitropropylthiophen** (Rufi), 1887, A., 804.

Nitroprussides (Norton), 1888, A., 932; (Prud'homme), 1890, A., 1387.
  formation of, without the use of nitric acid (Jensen), 1885, A., 739.
  preparation of (Prud'homme), 1891, A., 410.
  action of heat on (Etard and Bémont), 1885, A., 234.

Nitropurpurin and **ψ-nitropurpurin** (Brasch), 1891, A., 1078.

3-**Nitropyrocatechol,** behaviour of, with mordants (v. Kostanecki), 1889, A., 868.

Nitropyromecazone (Ost), 1883, A., 791.

2:5-*di***Nitropyromellitic acid**, and its ethylic salt (Nef), 1886, A., 64; 1888, T., 439.
Nitropyromucic acid (Priebs), 1885, A., 971.
*di***Nitropyrroline** (Ciamician and Silber), 1885, A., 993; 1886, A., 718.
Nitropyrroline-*α*-carboxylic acids, *α*- and *β*- (Anderlini), 1890, A., 66.
Nitropyrrolinephthalide (Anderlini), 1889, A., 58.
Nitropyrrylene dimethyl ketone (Ciamician and Silber), 1886, A., 718.
o-**Nitropyruvaldehydephenylhydrazone** (Bamberger), 1885, A., 157.
p-**Nitropyruvic acid phenylhydrazone** (Fischer and Ach), 1890, A., 41.
2:5-*di***Nitroquinol** (Nietzki), 1883, A., 465.
  constitution of (Nietzki and Preusser), 1887, A., 574.
*tri***Nitroquinol**, derivatives of (Nietzki and Kaufmann), 1892, A., 314.
Nitroquinols, diethyl derivatives of (Nietzki), 1883, A., 466; (Nietzki and Kaufmann), 1892, A., 314.
Nitroquinoline. See Quinoline.
Nitroquinoline-2′-carboxylic acid (Doebner and v. Miller), 1883, A., 602.
Nitroquinone, Etard's, probable non-existence of (Henderson and Campbell), 1890, T., 255.
Nitroresorcinol. See Resorcinol.
Nitroresorcinoldisulphonic acid (Ulzer), 1889, A., 510.
Nitroresorcinolsulphonic acid and its derivatives (Hazura), 1883, A., 1114.
*tetra***Nitrorosolic acid** (Ackermann), 1884, A., 1339.
Nitrosalicylaldehydes (v. Miller), 1887, A., 938; (Taege), 1887, A., 939; (Bradley and Dains), 1892, A., 1458.
3- and 5-**Nitrosalicylic acids** (Smith and Knerr), 1886, A., 704.
Nitrosamines (Fischer and Hepp), 1887, A., 729, 1114.
  constitution of (Erlenmeyer), 1883, A., 1103.
  action of hydrogen chloride on (Fischer and Hepp), 1887, A., 244.
Nitrosates and their derivatives (Wallach), 1888, A., 37.
Nitrosilicic acid, existence of (Rousseau and Tite), 1892, A., 684.
Nitrosites and their derivatives (Wallach), 1888, A., 37.
*iso***Nitroso-.** See parent substance, oxime of.
Nitrosoacetone (v. Pechmann), 1887, A., 1104.
  sodium salt of, action of benzylic chloride on (Meyer and Ceresole), 1883, A., 572.
*di***Nitrosoacetone** (v. Pechmann and Wehsarg), 1889, A., 34.
Nitrosoacetonephenylhydrazones, *mono-* and *di-* (v. Pechmann and Wehsarg), 1889, A., 47, 34.
*di***Nitrosoacetonephenylmethylhydrazone** (v. Pechmann and Wehsarg), 1889, A., 48.
Nitrosoallylacetone (Otte and v. Pechmann), 1889, A., 1139.
Nitrosoamidoethylpiperonylic anhydride (Perkin), 1890, T., 1018.
Nitroso-*α*-anilidopropionic acid (Reissert), 1892, A., 1456.
p-**Nitrosoaniline** (Fischer and Hepp), 1887, A., 1114; 1888, A., 460.
  action of phenylhydrazine on (Fischer and Wacker), 1888, A., 1286.
  phenylmethylhydrazone of (Fischer and Wacker), 1889, A., 702.
p-**Nitrosoanisidine** (Best), 1890, A., 608.
Nitrosoanthrone (Gimbel), 1887, A., 675.
  action of nitric acid on (Perkin), 1891, T., 641.
ψ-**Nitrosoanthrone** (Perkin), 1891, T., 645.
Nitrosoazo-compounds, constitution of (Willgerodt), 1892, A., 1321, 1453.
Nitrosoazobenzene. See Azobenzene.
Nitrosobarbituric acid (Ceresole), 1883, A., 913.
p-*di***Nitrosobenzene** (Nietzki and Kehrmann), 1887, A., 575.
Nitrosobenzeneazo-. See Benzeneazo-.
Nitrosobenzenesulphonic acid, preparation and salts of (Limpricht), 1892, A., 475.
*di***Nitrosobenzenylamidine** (Lossen and Mierau), 1888, A., 684.
*di***Nitrosobenzenylamidinebenzenylamidine** (Lossen and Mierau), 1888, A., 684.
Nitrosobenzylacetone (Ceresole), 1883, A., 41.
Nitroso-*o*-benzylamidoacetophenone (v. Baeyer), 1884, A., 1021.
p-**Nitrosobenzylaniline** (Fischer and Hepp), 1890, A., 614; (Boeddinghaus), 1891, A., 1205.
Nitroso-*β*-benzylhydroxylamine (Behrend and König), 1891, A., 1034.
p-**Nitrosobenzylmethylaniline** (Boeddinghaus), 1891, A., 1206.

Nitroso-β-benzylpiperidone (Aschan), 1891, A., 467.

p-**Nitrosobenzyl-*o*- and -*m*-toluidines** (Boeddinghaus), 1891, A., 1206.

p-**Nitroso*iso*butylaniline** (Wacker), 1888, A., 466.

Nitrosocamphor (Claisen and Manasse), 1889, A., 619.
  oxidation by, in presence of light (Cazeneuve), 1889, A., 1203.

Nitroso-compounds, preparation of (Willgerodt), 1891, A., 688.
  true, question of the existence of (Meyer), 1888, A., 702.
  constitution of (Meyer and Ceresole), 1883, A., 572.
  action of sulphurous anhydride on (Schmidt), 1890, A., 1305; 1892, A., 475.
  aromatic (Gabriel), 1883, A., 919.
  cyanhydrins of (Lippmann and Fleissner), 1885, A., 1212.

Nitroso-*o*-cresol (Nölting and Kohn), 1884, A., 1003; (Goldschmidt and Schmid), 1884, A., 1327.

Nitrosocresorcinol. See Nitroso-2:4-dihydroxytoluene.

*di*Nitroso-*n*-cumene (Kehrmann and Messinger), 1891, A., 298.

Nitroso-ψ-cumylazoresorcinol (v. Kostanecki), 1889, A., 137.

Nitrosocyanacetic acid (Wolff and Gans), 1891, A., 897.

Nitrosocyanides (Pavel), 1883, A., 297.

Nitrosocyanobutyric acid (Wolff), 1891, A., 418.

Nitrosodialkylanilines, periodides of (Dafert), 1883, A., 979.

Nitrosodibenzoylmethane (v. Pechmann), 1889, A., 712; (de Neufville and v. Pechmann), 1891, A., 318.

Nitrosodibenzylamine (Walder), 1887, A., 247.

Nitrosodibenzylhydroxylamine (Walder), 1887, A., 246.

Nitroso-1:3-diethoxybenzene (Kraus), 1892, A., 44.

Nitroso-*p*-diethoxydiphenylpiperazine (Bischoff and Trapesonzjanz), 1890, A., 1332.

Nitrosodiethyl ketone (Claisen and Manasse), 1889, A., 585.

Nitrosodiethylaniline cyanhydrin (Lippmann and Fleissner), 1885, A., 1213.

Nitrosodiethylene (Gibbs and Reichert), 1891, A., 1393.

1:3-*di*Nitroso-2:4-dihydroxytoluene (v. Kostanecki), 1888, A., 263.

Nitroso-*p*-dimethylamidobenzoic acid and its derivatives (Bischoff), 1889, A., 511.

Nitrosodimethylamidobenzophenone (Bischoff), 1889, A., 511.

Nitrosodimethyl-*m*-amidophenol (Möhlau), 1892, A., 887.

Nitrosodimethylaniline. See Dimethylaniline.

Nitroso-2:5-dimethylpyrrolidine (Tafel and Neugebauer), 1890, A., 1001.

Nitrosodi-β-naphthylamine (Ris), 1888, A., 58.

Nitroso-α-dipentenenitrolaniline (Wallach), 1892, A., 1348.

p-**Nitrosodiphenylamine** (Fischer and Hepp), 1887, A., 244; (Ikuta), 1888, A., 467.

p-**Nitrosodiphenylmethylamine** (Fischer and Hepp), 1890, A., 614.

p-**Nitrosodiphenyl-*m*-phenylenediamine** (Fischer and Hepp), 1890, A., 613.

Nitrosodipropylamine (*dipropylnitrosamine*) (Vincent), 1886, A., 1005.

Nitrosodipropylaniline cyanhydrin (Mandl), 1886, A., 793.

Nitrosodipyromeconic acid (Ost), 1883, A., 793.

*di*Nitrosoditoluene (Behrend and König), 1890, A., 1122.

Nitrosodi-*p*-tolyl*di*amido-*o*-diazothiole (Hector), 1890, A., 527.

Nitrosoethoxyethylphenol (Kraus), 1892, A., 45.

α-**Nitroso-β-ethoxynaphthalene** (v. Ilinski), 1886, A., 474.

Nitrosoethyl-*o*-amidocinnamic acid (Fischer and Kuzel), 1884, A., 440.

Nitrosoethylamido-β-phenylpropionic acid (Fischer and Kuzel), 1884, A., 1132.

1:4-**Nitrosoethylaniline** (Fischer and Hepp), 1887, A., 244.

Nitrosoethylic alcohol, oxime of (Alexéeff), 1886, A., 999.

p-**Nitrosoethyl-*o*-toluidine** (Fischer and Hepp), 1887, A., 244.

α-**Nitrosoglutaric acid** (Wolff), 1891, A., 419.

p-**Nitrosoguaiacol** (Best), 1890, A., 608.

Nitrosoguvacine (Jahns), 1892, A., 740.

*iso*Nitrosohesperidene. See Carvoxime.

Nitrosohippurylhydrazine (Curtius), 1891, A., 57.

Nitrosohydrazonehippuric acid (Curtius), 1891, A., 57.

3′-**Nitroso-4′-hydroxycarbostyril** (v. Baeyer and Homolka), 1884, A., 78, 1029.
p-**Nitroso-*m*-hydroxydiphenylamine** (Kohler), 1888, A., 587.
β_1-**Nitroso-γ_1-hydroxy-α_1-ketojuloline** (Kayser and Reissert), 1892, A., 884.
Nitroso-4-hydroxy-3-methylquinoline (Nölting and Trautmann), 1891, A., 326.
Nitroso-2′-hydroxy-4′-methyltetrahydroquinoline (Fischer and Wittmack), 1884, A., 1052.
Nitroso-*m*-hydroxy-*p*-tolylamine (Hatschek and Zega), 1886, A., 455.
o-**Nitroso-3-hydroxyquinoline** (Mathëus), 1888, A., 965.
μ-**Nitrosoimidothiazoline** (Näf), 1891, A., 1515.
Nitrosoindole (Zatti and Ferratini), 1890, A., 1293.
  molecular weight of (Zatti and Ferratini), 1892, A., 67.
Nitrosoindoxyl (v. Baeyer), 1883, A., 1131.
Nitrosoketones (Treadwell and Westenberger), 1883, A., 572; (Claisen), 1887, A., 463; (Claisen and Manasse), 1887, A., 944.
  decomposition of (v. Pechmann), 1888, A., 248.
*iso***Nitrosoketones.** See Ketoximes.
*iso***Nitrosolimonene.** See Carvoxime.
Nitrosolimonenenitrolaniline (Wallach), 1892, A., 1348.
Nitrosomalonic acid, constitution of (Meyer and Müller), 1883, A., 790.
Nitrosomethyl *iso*butenyl ketone (Claisen and Manasse), 1889, A., 585.
Nitrosomethyl ethyl ketone (Ceresole), 1883, A., 41.
Nitrosomethyl propyl ketone (Claisen and Manasse), 1889, A., 585.
o-**Nitrosomethylamidobenzamide** (Finger), 1888, A., 948.
Nitroso-*o*-methylamidobenzene (Meyer), 1886, A., 63.
Nitrosomethylamidophenylethane (Heumann and Wiernik), 1887, A., 1039.
1:4-**Nitrosomethylaniline** (Fischer and Hepp), 1887, A., 244.
  See also Phenylmethylnitrosamine.
p-**Nitrosomethyl-*o*-anisidine** (Best), 1890, A., 607.
Nitrosomethylcarbamide (v. Brüning), 1888, A., 936.
n-**Nitroso-*μ*-methylimidothiazoline** (Näf), 1891, A., 1516.
μ-**Nitroso-*n*-methylimidothiazoline** (Näf), 1891, A., 1516.
Nitrosomethyl-*o*-nitro-*p*-diazobenzene chloride (*o-nitro-ω-nitroso-p-diazotoluene chloride*) (Meyer), 1886, A., 63.
Nitroso-*p*-methyloxindole (Meyer), 1884, A., 48.
5-**Nitrosomethyl-*o*-toluidine** (Kock), 1888, A., 469.
6-**Nitrosomethyl-*o*-xylidine** (Fischer and Hepp), 1890, A., 913; (Menton), 1891, A., 1204.
p-**Nitrosomethyl-*p*-xylidine** (Pflug), 1890, A., 607.
1:2-*di***Nitrosonaphthalene** (v. Ilinski), 1886, A., 472.
1:4-*di***Nitrosonaphthalene** (Nietzki and Guitermann), 1888, A., 471.
Nitrosonaphtharesorcinols, *mono-* and *di-* (v. Kostanecki), 1889, A., 887.
Nitrosonaphthol. See Naphthaquinoneoxime.
2-**Nitroso-α-naphthol-4-sulphonic acid** (Witt and Kaufmann), 1892, A., 195.
Nitroso-β-naphthol-3′- and -4-sulphonic acids, 1- and 2-, metallic salts of (Hoffmann), 1892, A., 346.
2-**Nitroso-α-naphthylamine** (Harden), 1890, A., 630.
1-**Nitroso-β-naphthylamine** (v. Ilinski), 1884, A., 1035; (Harden), 1890, A., 630.
α-**Nitroso-β-naphthylethylamine** (Fischer and Hepp), 1887, A., 1114; 1888, A., 461.
β-**Nitroso-α-naphthylethylamine** (Harden), 1890, A., 631.
p-**Nitroso-α-naphthylethylamine** (Kock), 1888, A., 469.
Nitroso-orcinol (Kraemer), 1884, A., 1341.
*di***Nitroso-orcinol** (Goldschmidt and Strauss), 1887, A., 808.
Nitroso-oxindole (Gabriel), 1883, A., 920; (v. Baeyer), 1883, A., 1131.
Nitroso-oxymethylquinoline. See Oxymethylquinoline.
Nitroso-1- and -3-oxyquinoline, 2- and 4-, tinctorial properties of (v. Kostanecki), 1891, A., 579.
*di***Nitrosopentamethylenetetramine** (Griess and Harrow), 1888, A., 1268.
p-**Nitrosophenol.** See Quinoneoxime.
p-**Nitrosophenylbenzylnitrosamine** (Boeddinghaus), 1891, A., 1206.

Nitroso-ψ-phenylhydrazidomandelic acid (Reissert and Kayser), 1891, A., 439.
Nitrosophenylic benzoate (Walker), 1884, A., 1003.
Nitroso-2′-phenylindole (Fischer and Schmidt), 1888, A., 698.
p-**Nitrosophenylmethylnitrosamine** (Fischer and Hepp), 1887, A., 244.
Nitroso-2′-phenyltetrahydroquinoline (Doebner and v. Miller), 1886, A., 722.
p-**Nitrosophenyl-*p*-toluidine** (Reichold), 1890, A., 609.
Nitrosophthalimidine (Graebe), 1885, A., 166.
*di***Nitrosopiperazine** (Ladenburg), 1891, A., 1333.
*tri***Nitrosopropane** (v. Pechmann and Wehsarg), 1889, A., 34.
β-**Nitrosopropionic acid** (v. Pechmann), 1891, A., 1458; (Hantzsch), 1892, A., 1069.
Nitrosopropiophenone (v. Pechmann and Müller), 1888, A., 1088; (Claisen and Manasse), 1889, A., 585; (Gudeman), 1889, A., 613.
p-**Nitrosopropylaniline** and nitrosamine of (Wacker), 1888, A., 466.
4-**Nitrosoresorcinol**, salts of (Fèvre), 1883, A., 733; (Walker), 1884, A., 1003.
*di***Nitrosoresorcinol** (Goldschmidt and Strauss), 1887, A., 808.
Nitrosoresorcinoldisulphonic acid (Ulzer), 1889, A., 510.
Nitroso*iso*strychnic acid (Tafel), 1892, A., 1012.
Nitrososulphides (Pavel), 1883, A., 297.
Nitrososulphonic acids, preparation of (Limpricht), 1892, A., 475.
Nitrosoterpene (Goldschmidt and Zürrer), 1885, A., 1210.
p-**Nitroso-α-tetrahydronaphthylethylamine hydrochloride** (Bamberger and Helwig), 1889, A., 892.
Nitrosotetrahydroquinoline, *p-mono-* and *di-* (Ziegler), 1888, A., 610.
Nitrosotetramethyl*di*amidobenzophenone, salts of (Bischoff), 1889, A., 511.
Nitrosotetramethylphenylenediamine hydrochloride, and derivatives of (Witt), 1885, A., 782.
Nitrosothiomethylaniline and **nitrosothionylmethylaniline** (Michaelis and Godchaux), 1891, A., 74.
6-**Nitrosothymol** (Sutkowski), 1887, A., 41.
  action of hydroxylamine on (Kehrmann and Messinger), 1890, A., 1403.
2:5-*di***Nitrosotoluene** (Mehne), 1888, A., 463; (Nietzki and Guitermann), 1888, A., 471.
ω-**Nitroso-*o*-toluidine** (Meyer), 1886, A., 63.
Nitrosotoluidines (Mehne), 1888, A., 463.
Nitrosotriacetonine (Fischer), 1884, A., 1290.
Nitrosotriphenyl*tri*amidobenzene (Minunni), 1891, A., 190.
Nitrosotriphenylmethylaniline (Elbs), 1884, A., 1031.
Nitrosotriphenylmethyl-*p*-toluidine (Wittich), 1884, A., 1032.
Nitrosotri-*p*-tolyl*tri*amidobenzene (Minunni), 1891, A., 190.
2:5-*di***Nitroso-*p*-xylene** (Pflug), 1890, A., 607.
*di***Nitroso-*m*-xylenecarboxylic acid** (Claus), 1890, A., 980.
5-**Nitroso-*p*-xylenol.** See *p*-Xyloquinoneoxime.
*di***Nitroso-*m*-xylylglyoxylic acid** (Claus), 1890, A., 979.
Nitrostilbazole. See Nitro-α-styrylpyridine.
Nitrostilbene (Anschütz and Romig), 1885, A., 768.
o-*di***Nitrostilbene** (Bischoff), 1888, A., 1094.
p-*di***Nitrostilbene bromide** (Elbs and Bauer), 1887, A., 151.
Nitrostrychnic acid (Loebisch and Schoop), 1886, A., 814.
Nitrostrychnine (Loebisch and Schoop), 1886, A., 267.
*di***Nitrostrychnine** and its salts (Hanriot), 1883, A., 669.
Nitrostyrene. See Styrene.
o-**Nitrostyryl methyl ketone** (v. Baeyer and Drewsen), 1883, A., 341; (Fischer and Kuzel), 1883, A., 587.
p-**Nitrostyryl methyl ketone** (v. Baeyer and Becker), 1883, A., 1120.
o-**Nitrostyrylacrylic acid** (Diehl and Einhorn), 1885, A., 1222.
m-**Nitro-α-styrylpyridine** and its reduction products (Schuftan), 1890, A., 1437.
o-**Nitrostyrylvinyl methyl ketone** (Diehl and Einhorn), 1885, A., 1222.
p-**Nitrostyrylvinyl methyl ketone** (Einhorn and Gehrenbeck), 1890, A., 162.
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  derivatives of (Luckenbach), 1884, A., 1134; (Meyer), 1888, A., 693.
Phenylacetonitrile (*benzylic cyanide*), *m*-amido- (Friedländer), 1884, A., 737; (Salkowski), 1884, A., 1176.
Phenylacetonitrile (*benzylic cyanide*), *p*-amido-, and its salts (Friedländer and Mähly), 1883, A., 919; (Friedländer), 1884, A., 737.
  chloro- (Michael and Jeanprêtre), 1892, A., 1088.
  o-cyano- (Gabriel and Otto), 1887, A., 1035.
   action of hydroxylamine on (Eichelbaum), 1890, A., 146.
  m-cyano- (Reinglass), 1891, A., 1344.
  p-cyano- (Mellinghoff), 1890, A., 239.
  o-nitro- (Perkin), 1883, T., 111; (Salkowski), 1884, A., 1176; (Bamberger), 1887, A., 131.
  m-nitro- (Salkowski), 1884, A., 1176.
  p-nitro-, diazo-derivatives of (Perkin), 1883, T., 111.
   condensation products of (Remse), 1891, A., 208.
Phenylacetonitrilecarbamide (Pinner and Lifschütz), 1887, A., 1055.
Phenylacetonitrile-*o*-carboxylic acid, and its salts (Wislicenus), 1885, A., 532.
Phenylacetonylphenylic sulphide (Delisle), 1889, A., 489.
Phenylacetophenylhydrazide (Bülow), 1887, A., 138; (Purgotti), 1891, A., 59.
Phenylaceto-*o*-toluidide (Bischler), 1892, A., 1465.
Phenylaceto-*p*-toluidide (Purgotti), 1891, A., 59; (Bischler), 1892, A., 1465.
Phenylacetotolylenediamide (Bistrzycki and Cybulski), 1891, A., 694.
Phenylacetoxy-. See Acetoxyphenyl-.
Phenylacetylacetone (Fischer and Bülow), 1885, A., 1237.
Phenylacetylene (Holleman), 1888, A., 261.
  reduction of (Aronstein and Holleman), 1889, A., 878.
  silver derivative of (Liebermann and Damerow), 1892, A., 831.
Phenylacetylenebenzoylacetic acid (Kapf and Paal), 1888, A., 839; 1889, A., 148.
Phenylacetylide, silver derivative of (Liebermann and Damerow), 1892, A., 831.
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Phenylacridine (Bernthsen), 1883, A., 580; 1884, A., 1356; (Bernthsen and Bender), 1883, A., 1133.
  from chrysaniline (Fischer and Körner), 1884, A., 749.

Phenylacridine, derivatives of (Bernthsen), 1884, A., 1356; (Claus and Nicolaysen), 1886, A., 68.
  ammonium bases of (Bernthsen), 1892, A., 1095.
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Phenylacrosazones, α- and β- (Fischer and Tafel), 1888, A., 39.
α-Phenylacrylic acid. See Atropic acid.
β-Phenylacrylic acid. See Cinnamic acid.
Phenyl-α-alanine. See α-Anilidopropionic acid and Phenyl-α-amidopropionic acid.
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Phenylalanine-*p*-sulphonic acid (Erlenmeyer and Lipp), 1883, A., 993.
Phenylallenyl-. See Cinnamenyl-.
Phenylallylacetonitrile (Buddeberg), 1890, A., 1142.
Phenylallylene (Körner), 1888, A., 368.
  and its *di*- and *tetra*-bromide (Körner), 1889, A., 372.
Phenylallylhydrazine (Fischer and Knoevenagel), 1887, A., 933.
as-**Phenylallylhydrazine** (Michaelis and Claessen), 1889, A., 1161.
Phenylallylhydrazonephthalaldehydic acid (Allendorff), 1891, A., 1371.
Phenylallylideneamidodimethylaniline (Nuth), 1885, A., 784.
Phenylallylsemithiocarbazide (Dixon), 1890, T., 262; P., 25.
Phenylallylsulphone (Otto), 1891, A., 1067.
Phenylallyltetrazone (Michaelis and Claessen), 1889, A., 1161.
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Phenylamidoacetic acid, derivatives of (Kossel), 1892, A., 467.
  calcium salt of (Mauthner and Suida), 1889, A., 1068.
Phenylamidoacetomethylanilide (*phenylglycinmethylanilide*) (Bischoff), 1888, A., 726.
Phenyl-*m*-amidobenzylamine (Borgmann), 1886, A., 57.
1-Phenylamido-2:5-dimethylpyrroline-3:4-dicarboxylic acid (Knorr), 1885, A., 555.
Phenyl*di*amidoditolylmethane (Ullmann), 1885, A., 1236.
Phenylamidoimidoethenylamidophenyl mercaptan (*phenylamidine*) (v. Hofmann), 1887, A., 1040.
Phenyl-β-amidolactic acid (Erlenmeyer), 1889, A., 988.
"**Phenylamidomesoxalic chloride**" (Nef), 1892, A., 1439.
Phenylamidomethenylamido- (*carbanilamido-*) **-cresol, -cumenol, -α- and -β-naphthols, and -phenanthrol** (Jacobson and Schencke), 1890, A., 248.
Phenylamidomethenylamidonaphthol (Jacobson), 1888, A., 487.
Phenylamidomethenylamidothiophenol (Jacobson and Frankenbacher), 1891, A., 1049.
6-Phenylamido-5-methyl-2:4-diethyl-*m*-diazine (v. Meyer), 1889, A., 685.
4-Phenylamido-β-naphthol, *di*chloro- (Zincke and Kegel), 1889, A., 268.
Phenylamidonaphthylcarbamide (Goldschmidt and Rosell), 1890, A., 616.
Phenyl*di*-*p*-amidophenyl*iso*butylmethane, *m*- and *p*-nitro- (Bischler), 1889, A., 133.
Phenyl-*m*-amidophenylmethylcarbamide (*m-amido-s-diphenylmethylcarbamide*) (Lellmann and Benz), 1891, A., 1215.
Phenyl-α-amidopropionic acid, formation of, by the action of stannous chloride on albuminoids (Schulze and Barbieri), 1883, A., 1122.
  formation of, by the decomposition of albumin (Schulze and Barbieri), 1885, A., 581.
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Phenyl-α-amidopropionitrile (Erlenmeyer and Lipp), 1883, A., 992.
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Phenyl*di*-*p*-amidotolylmethane, *m*-amido- (Bischler), 1889, A., 133.
  α- and β-*m*-nitro- (Bischler), 1889, A., 133.
  α- and β-*p*-nitro- (Bischler), 1888, A., 287.

Phenyl*di*amido-*m*-xylylmethane, *m*- and *p*-nitro- (Bischler), 1889, A., 134.
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Phenylamine. See Aniline.
Phenylamines, compounds of benzotrichloride with (Doebner), 1883, A., 861.
  substituted, action of silicon *tetra*chloride on (Reynolds), 1892, T., 453.
Phenylammeline [m.p. 125°] (Smolka and Friedreich), 1890, A., 618.
Phenylammeline [m.p. 245°] (Otto), 1887, A., 1034.
1-Phenylammoniochelidonic acid (Lieben and Haitinger), 1884, A., 1196.
Phenylamylacetonitrile (*phenylheptonitrile*) (Rossolymo), 1889, A., 862.
γ-Phenyl-α-*iso*amylbutenyllactone (Paal and Hoffmann), 1890, A., 1101.
β-Phenyl-α-*iso*amylbutyrolactone (Paal and Hoffmann), 1890, A., 1101.
Phenylamylcarbamide (Freund and Lenze), 1890, A., 1388.
Phenylamylene (*phenylpentylene*) and its *di*bromide (Schramm), 1883, A., 977.
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Phenyl-α-*iso*amylhydrazine (Philips), 1887, A., 1104.
Phenylamylthiocarbamide (Freund and Lenze), 1890, A., 1388.
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Phenylangelic acid, formation of (Slocum), 1885, A., 662.
  preparation of (Edeleanu), 1891, A., 1225.
Phenylangelicalactones (Erdmann), 1890, A., 377; (Fittig and Stern), 1892, A., 987.
α-Phenylanisacrylonitrile (Frost), 1889, A., 598.
Phenyl-*o*-anisylcarbamide (Goldschmidt and Ernst), 1890, A., 1411.
Phenylanisyldesaurin (Ney), 1888, A., 1198.
***p*-Phenylanisylethane** (Freund and Remse), 1890, A., 1423.
β-Phenyl-γ-*p*-anisylpropylamine (Freund and Remse), 1890, A., 1423.
***o*-Phenylanisylthiocarbamide** (Foerster), 1888, A., 946.
Phenylanisyluramidoxime (Hochheim), 1890, A., 1265.
Phenylanthracene, preparation of (Linebarger), 1892, A., 722.
Phenylanthranilic acid (Graebe and Lagodzinski), 1892, A., 1086.
Phenylarabinosazone (Scheibler), 1884, A., 1287.
Phenylarsine sulphides (Schulte), 1883, A., 186.
Phenylasparaginphenylimide (*phenylasparaginanil*) (Piutti), 1885, A., 796; (Anschütz and Wirtz), 1887, A., 934.
Phenylaspartanil (Ossipoff), 1889, A., 124.
Phenylaspartic acid (*anilidosuccinic acid*) (Anschütz and Wirtz), 1887, A., 934; (Hell and Poliakoff), 1892, A., 819.
  derivatives of (Kusserow), 1889, A., 1064.
Phenylauramine and its salts (Fehrmann), 1888, A., 157.
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Phenylbenzenylamidine (Lossen), 1892, A., 51.
Phenylbenzenylimidoximecarbonyl (Müller), 1886, A., 875.
Phenylbenzenyl-αβ-naphthylenediamine (Fischer), 1892, A., 1472.
Phenylbenzhydryl-*o*-benzoic lactone (Elbs), 1890, A., 514.
Phenylbenzidine, *di-o*-nitro- (Schöpff), 1889, A., 773.
Phenylbenzimidoethyl ether (Lossen), 1892, A., 52.
Phenylbenzocreatine (Traube), 1883, A., 193.
Phenylbenzoglycocyamidine (Griess), 1885, A., 1227.
  imido- (Griess), 1885, A., 1225.
Phenylbenzoglycocyamidinecarboxylic acid (Griess), 1885, A., 1227.
Phenylbenzoglycocyamine and amido-, and their hydrochlorides (Griess), 1883, A., 669.
Phenylbenzoic acid. See *o*-Diphenylcarboxylic acid.
Phenylbenzo-β-naphthacridine (Claus and Richter), 1884, A., 1359.
***p*-Phenylbenzophenone** and its oxime and phenylhydrazone (Koller), 1892, A., 186.
Phenylbenzoyl-. See Benzoylphenyl-.
1-Phenylbenzoyl-oximepyrazole and **-phenylhydrazonepyrazole** (Balbiano), 1890, A., 798.
Phenylbenzylacetic acid [b.p. 330°] (Meyer), 1888, A., 693; (v. Miller and Rohde), 1892, A., 1211.
Phenylbenzylacetoxime-*o*-carboxylic acid (Gabriel), 1885, A., 903.

Phenylbenzylamylcarbinyl cyanide (*diphenyloctonitrile*) (Rossolymo), 1889, A., 862.
Phenylbenzyl-*o*-benzoic acid (Elbs), 1890, A., 514.
Phenyl-*p*-benzylcarbamide (*p-diphenylmethanecarbamide*) (Manns), 1889, A., 261.
Phenylbenzylcarbamide, *m*-nitro- (Kühn and Riesenfeld), 1892, A., 312.
Phenylbenzylethylthiocarbamide (Dixon), 1891, T., 564.
Phenylbenzylethylthiocarbamides, isomeric (Dixon), 1892, T., 540.
Phenylbenzylformamidine (Comstock and Clapp), 1892, A., 708.
Phenylbenzylhydrazine phosphenite (Michaelis and Oster), 1892, A., 1325.
  o-amido-, and *o*-nitro- (Paal and Bodewig), 1892, A., 1455.
Phenyl-α-benzylhydrazine (Philips), 1887, A., 1104; 1889, A., 1159.
Phenyl-*p*-benzylhydrazine (*diphenylmethanehydrazine*) (Manns), 1889, A., 261.
Phenylbenzylhydrazine, thionyl- (Michaelis and Ruhl), 1892, A., 1324.
Phenylbenzylhydroxycarbamide (Tiemann), 1889, A., 1165; (Voltmer), 1890, A., 1127; 1891, A., 559.
Phenylbenzylhydroxythiocarbamide (Tiemann), 1889, A., 1165; (Voltmer), 1890, A., 1126; 1891, A., 558.
m-**Phenylbenzylic alcohol**(Adam),1888, A., 959.
Phenylbenzylideneallylhydrazine (Michaelis and Claessen), 1889, A., 1161.
Phenylbenzylidenebenzenylamidine (Lellmann and Stickel), 1886, A., 793.
Phenyl-*o*-benzylidenediamine (Söderbaum and Widman), 1890, A., 1258.
Phenylbenzylidene-ethylhydrazine (Philips), 1889, A., 1158.
Phenylbenzylidenehydrazine (Reissert), 1884, A., 1152; (Philips), 1887, A., 1105.
  derivatives of (Schroeder), 1884, A., 1323.
  o-nitro- (Bischler), 1890, A., 148.
  m-nitro- (Bischler and Brodsky), 1890, A., 150.
  thio- (Ruhl), 1892, A., 1326.
"**Phenylbenzylidenehydrazine,** *di*-cyano-" (Bladin), 1889, A., 702.
2′-**Phenylbenzylideneindole** (Fischer and Schmidt), 1888, A., 699.
Phenylbenzylidenemethylhydrazine (Elbers), 1885, A., 535.
1-**Phenyl-4-benzylidene-3-methylpyrazolone** (Knorr), 1887, A., 602.
1-**Phenyl-4-benzylidene-3:5-pyrazolidone** (Michaelis and Burmeister), 1892, A., 1005.
3′:2′-**Phenylbenzylindole** (Trenkler), 1889, A., 260.
Phenylbenzylmethylcarbamide (Kühn and Riesenfeld), 1892, A., 312.
1-**Phenyl-3-benzyl-5-methyl-pyrazole** (Fischer and Bülow), 1885, A., 1237.
Phenylbenzylmethylthiocarbamides (Dixon), 1891, T., 562, 564; P., 85.
Phenylbenzylnitrosamine, preparation of (Antrick), 1885, A., 543.
  p-nitroso- (Boeddinghaus), 1891, A., 1206.
Phenylbenzyl*iso*phosphine (Michaelis and Gleichmann), 1883, A., 185.
Phenylbenzylpropylcarbinyl cyanide (Rossolymo), 1889, A., 862.
Phenylbenzylsemithiocarbazide (Dixon), 1892, T., 1021.
Phenylbenzylsulphone(Knoevenagel), 1888, A., 706; (Otto), 1890, A., 380.
  *exo*chloro- (Otto), 1890, A., 379.
Phenylbenzylthiocarbamide (Dixon), 1889, T., 300.
  asymmetrical (Werner), 1892, P., 97.
  cyano- (Freund and Immerwahr), 1890, A., 1408.
Phenylbetaineamide chloride (Silberstein), 1885, A., 160.
Phenylbiazolone, amido- (Freund and Kuh), 1890, A., 1441.
Phenylbismuthine *di*bromide (Michaelis), 1887, A., 368.
Phenylbismethyltetrahydroquinolylmethane, amido-. See Phenyldimethyloctohydrodiquinolylmethane, amido-.
Phenyl-γδ-*di*bromethyl-β-bromacrylic acid, *p*-nitro- (Einhorn and Gehrenbeck), 1889, A., 396; 1890, A., 162.
Phenylbromethyllactic acid, *p*-nitro-, lactone of (Einhorn and Gehrenbeck), 1889, A., 397.
Phenyl*di*bromobutinenecarboxylic acid, *p*-nitro- (Einhorn and Gehrenbeck), 1889, A., 396.
Phenyl*tri*bromomethane (Ince), 1885, P., 131.
Phenyl-*mono*- and -*di*-bromomethylsulphones (Otto), 1890, A., 381.
Phenyl*di*bromonitromethane (Gabriel and Koppe), 1886, A., 693.

Phenyl*iso*bromoparaconic acid (Fittig and Leoni), 1890, A., 895.

Phenyl-*p*-bromophenylhydrazine, *o*:*p*-*di*nitro- (Willgerodt and Ellon), 1891, A., 1362.

Phenyl*di*bromopropenylethoxime chloride (Wolff), 1890, A., 42.

Phenyl-β-bromopropionic acid, and its derivatives (Basler), 1884, A., 603.
  5-chloro-2-nitro- (Eichengrün and Einhorn), 1890, A., 1127.
  o-nitro-, and its derivatives (Einhorn), 1884, A., 65.
  m-nitro- (Prausnitz), 1884, A., 1175.

β-Phenyl*tri*bromopropionic acid (Kinnicutt and Palmer), 1884, A., 603.

Phenyl-β- and -γ-bromopropylacetamides (Elfeldt), 1892, A., 214.

Phenyl-β-brom*iso*succinic acid, *o*- and *p*-nitro- (Stuart), 1886, T., 362.

Phenyl*di*brom*iso*succinic acid (Stuart), 1886, T., 360.
  m- and *p*-nitro- (Stuart), 1886, T., 361.

α-Phenyl*tri*bromothiophen, *p*-bromo- (Kues and Paal), 1887, A., 239.

***n*-Phenylbromotrimethylene-ψ-thiocarbamide** (Dixon), 1892, T., 550.

Phenyl*iso*butaldehyde (v. Miller and Rohde), 1890, A., 979.

Phenylbutane. See Butylbenzene.

Phenylbutinene methyl ketone. See Styrylvinyl methyl ketone.

Phenylbutinenecarboxylic acids, nitro- (Einhorn and Gehrenbeck), 1889, A., 271; 1890, A., 163.

Phenylbutinenedicarboxylic acid (Stuart), 1886, T., 366.

Phenyl*iso*butylallyl-carbamide and -thiocarbamide (Paal and Heupel), 1892, A., 31.

Phenylbutylamine (*butylaniline*) (Kahn), 1886, A., 263.

Phenyl*iso*butylamine. See *iso*Butylbenzene, amido-.

Phenylbutylene (*isobutenylbenzene*) (Fittig and Jayne), 1883, A., 471; (Fittig and Liebmann), 1890, A., 777.

β-Phenylbutylene, molecular refraction and dispersion of (Gladstone), 1891, T., 295.

Phenyl-α-*iso*butylhydrazine (Philips), 1887, A., 1104.

Phenyl*iso*butyl-hydrazine and **-hydrazone,** thionyl- (Michaelis and Ruhl), 1892, A., 1324.

***s*-Phenyl*iso*butylthiocarbamide** (Hecht), 1892, A., 702.

Phenyl*iso*butylthiocarbimide (Pahl), 1884, A., 1010.

Phenylbutyric acid (Jayne), 1883, A., 473.
  α- and β-bromo- (Jayne), 1883, A., 472; (Fittig and Morris), 1890, A., 891.
  αβ-*di*bromo-, decomposition of (Fittig, Obermüller and Schiffer), 1892, A., 987.
  γ-chloro- (Fittig and Morris), 1890, A., 891.
  α-iodo- (Fittig and Morris), 1890, A., 891.

Phenyl*iso*butyric acid (*α-methylhydrocinnamic acid*), derivatives of (Edeleanu), 1887, A., 583; 1888, T., 558; P., 55.
  αβ-*di*bromo- (A. Körner), 1888, A., 368.
    derivatives of (A. Körner), 1888, A., 368; (T. Körner), 1889, A., 372.
  m-chloro- (v. Miller and Rohde), 1890, A., 1140.
  p-nitro- and nitramido- (Edeleanu), 1888, T., 558.

α-Phenylbutyric acid (*phenylethylacetic acid*) (Neure), 1889, A., 597.

Phenylbutyric-*o*-carboxylic acids (Roser), 1886, A., 243.

Phenylbutyrolactone (Jayne), 1883, A., 472.
  action of halogen acids on (Fittig and Morris), 1890, A., 891.
  action of halogen acids and of gaseous ammonia on (Fittig), 1884, A., 744.
  β-bromo- and *iso*bromo- (Fittig, Obermüller and Schiffer), 1892, A., 987.

Phenyl*iso*butyroxypivalic acid and anhydride (Ott), 1885, A., 663.

Phenylcacodyl (*tetraphenyldiarsine*) (Michaelis and Schulte), 1883, A., 187.

Phenylcarbamic acid, sulpho- (Nölting), 1889, A., 144.

Phenylcarbamide and its derivatives (Pinnow), 1892, A., 460.
  action of halogenated amines on (Gattermann), 1886, A., 795.
  bromo-derivatives of (Bertram), 1892, A., 467.
  di-p-chloro- (Hewitt), 1891, T., 212.

Phenylcarbamides, thio-, melting points of (Paschkowetzky), 1892, A., 324.

Phenylcarbamyl-. See Carbanilido-.

Phenylcarbazacridine (Bizzarri), 1891, A., 219.

Phenylcarbizinecarboxyl-amide and -anilide (Freund and Goldsmith), 1888, A., 1187.

Phenylcarbizinecarboxylic acid, amido- (Freund and Kuh), 1890, A., 1441.
Phenylcarbizine-thiamide and **-thianilide** (Freund and Goldsmith), 1888, A., 1188.
Phenylcarbylamine. See Phenylic *iso*cyanide.
Phenyl*di*chlorocarbindimethylcarbinol (Willgerodt and Genieser), 1888, A., 811.
Phenyl-*m*-chlorophenylhydrazine, *o*:*p*-*di*nitro- (Willgerodt and Mühe), 1892, A., 454.
Phenyl-*p*-chlorophenylhydrazine, *o*:*p*-*di*nitro- (Willgerodt), 1890, A., 1119; (Willgerodt and Böhm), 1891, A., 906.
Phenylchrysylthiocarbamide (Abegg), 1891, A., 731.
α-Phenylcinchonic acid (2′-*phenylquinoline*-4′-*carboxylic acid*) (Doebner), 1887, A., 504.
  homologues of (Doebner and Gieseke), 1888, A., 300.
Phenylcinnamenyl-uramidethoxime and **-uramidoxime** (Wolff), 1890, A., 42.
α-Phenylcinnamic acid, derivatives of (Cabella), 1884, A., 1348.
  o-nitro- (Oglialoro-Todaro and Rosini), 1891, A., 214.
α-Phenylcinnamonitrile (Neure), 1889, A., 597.
α-Phenyl-β-cinnamylideneacrylic acid (Rebuffat), 1885, A., 1137.
α-Phenyl-β-cinnamylideneneacrylonitrile (Freund and Immerwahr), 1890, A., 1408.
Phenylcitraconazide, nitro- (Michael), 1886, A., 699.
1-Phenylcomenamic acid (Mennel), 1885, A., 1203.
Phenylconiine, *o*:*p*-*di*nitro- (Lellmann and Just), 1891, A., 1245.
Phenyl-*p*-coumaric acid, synthesis of (Oglialoro-Todaro), 1884, A., 176.
  derivatives of (Cabella), 1888, A., 694.
Phenylcoumarin, crystallography of (Scacchi), 1885, A., 901.
Phenylcoumarinsulphonic acids, and their salts (Curatolo), 1885, A., 539.
Phenylcrotonaldehyde, *m*-amido- (v. Miller and Kinkelin), 1886, A., 701.
  m-nitro- (v. Miller and Kinkelin), 1886, A., 560.
    base from (v. Miller and Kinkelin), 1886, A., 701.
Phenylcrotonaldehyde, *m*-nitro-, product of the reduction of (v. Miller and Kinkelin), 1886, A., 799.
Phenylcrotonic acid (*α-methylcinnamic acid; phenylmethylacrylic acid*) (Stuart), 1883, T., 404, 407; (Raikow), 1888, A., 369.
  preparation of (Erdmann), 1885, A., 528.
  formation of (Slocum), 1885, A., 662.
  nitration of, in the side chain (Erdmann), 1891, A., 1483.
  action of sulphuric acid on (Erdmann), 1885, A., 528.
  derivatives of (Edeleanu), 1887, A., 583; 1888, T., 558; P., 55.
  β-bromo- (Körner), 1888, A., 368.
  β-chloro- (Perkin and Calman), 1886, T., 158; P., 139.
  m-chloro- (v. Miller and Rohde), 1890, A., 1139.
  m-nitro- (v. Miller and Rohde), 1890, A., 1140.
Phenyl*iso*crotonic acid (*βγ-phenylcrotonic acid*) and its derivatives (Jayne), 1883, A., 472; (Buchner and Dessauer), 1892, A., 850.
  action of nitric acid on (Erdmann), 1884, A., 906.
  oxidation of (Fittig), 1888, A., 595; (Fittig and Obermüller), 1892, A., 986.
  p-chloro- (Schwechten), 1890, A., 620; (Erdmann and Schwechten), 1891, A., 449.
  2:4- and 2:5-*di*chloro- (Schwechten), 1890, A., 620; (Erdmann and Schwechten), 1891, A., 450.
  3:4-*di*chloro- (Erdmann), 1889, A., 265; (Schwechten), 1890, A., 620; (Erdmann and Schwechten), 1891, A., 451.
Phenylcrotonitrilecarbamide (Pinner and Lifschütz), 1887, A., 1055.
Phenyl*iso*croton-α-lactone (Biedermann), 1892, A., 472.
Phenylcumazonic acid (Widman), 1884, A., 304.
Phenylcumylthiocarbamide (Goldschmidt and Gessner), 1887, A., 1039.
Phenylcyanamide and its derivatives (v. Hofmann), 1886, A., 233.
  preparation of (Berger), 1884, A., 1157.
  action of acetamide on (Berger), 1885, A., 387.
Phenylcyanethine. See 6-Phenylamido-5-methyl-2:4-diethyl-*m*-diazine.

Phenylcyantetrazole (Bladin), 1887, A., 139.
Phenyl*iso*cyanuric acid (Rathke), 1888, A., 591; (Smolka and Friedreich), 1890, A., 618.
Phenyl-*p*-cymylcarbinol (Claus and Elbs), 1885, A., 1065; (Elbs), 1887, A., 942.
Phenylcysteine, bromo-, action of acetic anhydride on (Baumann), 1885, A., 514.
Phenyldehydrohexone (Perkin), 1887, T., 731.
  action of hydrogen bromide on (Perkin), 1887, T., 732.
Phenyldehydrohexonecarboxylic acid (Perkin), 1887, T., 728; (Kipping and Perkin), 1890, T., 308.
  action of hydrogen bromide and of water on (Perkin), 1887, T., 732.
  p-nitro- (Perkin), 1887, T., 736.
Phenyldehydropentone (Marshall and Perkin), 1891, T., 886.
Phenyldi-*p*-acetamidoditolylmethane, *β*-*p*-nitro- (Bischler), 1889, A., 132.
Phenyldiacetyl (Müller and v. Pechmann), 1889, A., 1171.
Phenyldi*iso*amylamine (Lloyd), 1887, A., 721; 1889, A., 700.
Phenyldiamylhydrazine (Grimaldi), 1891, A., 302.
Phenyldianethoilmethane, *m*-nitro- (de Varda), 1891, A., 1347.
Phenyldibenzylcarbamide (Hammerich), 1892, A., 1083.
5-**Phenyl-2:4-dibenzyl-*m*-diazine,** 6-amido- (Wache), 1889, A., 684.
as-**Phenyldibenzylthiocarbamide** (Dixon), 1891, T., 567.
Phenyldi*iso*butylamine (Lloyd), 1887, A., 721; 1889, A., 700.
Phenyldi*iso*butylcarbamide, -guanidine and -thiocarbamide (Pahl), 1884, A., 1010.
Phenyldi-*o*-cresolmethane (*phenyldihydroxyditolylmethane*), *m*-nitro- (Siboni), 1892, A., 621.
Phenyldiethyl ethylene oxide (Henry), 1883, A., 803.
Phenyldiethylacetamidine and its hydrochloride (Luckenbach), 1884, A., 1135.
Phenyldiethylalkine. See Hydroxyethylethylaniline.
Phenyldiethylarsine (Schulte), 1883, A., 186.
  action of benzylidenic chloride on (Holle), 1892, A., 984.
Phenyldiethylazonium iodide (Philips), 1889, A., 1158.
Phenyldiethylcarbamide (Gebhardt), 1885, A., 383.
Phenyldiethylenetriamine (Gabriel), 1889, A., 1167.
Phenyldiethylethylidenetrisulphone (Laves), 1892, A., 613.
Phenyldiethylformamidine (Comstock and Wheeler), 1892, A., 707.
Phenyldiethylmethenyltrisulphone, and its chloro- and bromo-derivatives (Laves), 1892, A., 613.
Phenyldiethylthiocarbamine derivatives (Billeter), 1887, A., 823.
Phenyldifurylnaphthadihydroquinoxaline (Fischer), 1892, A., 1475.
Phenyldiguanide derivatives (Smolka and Friedreich), 1888, A., 830.
2′-**Phenyl-1′:3′-dihydroindazine** (Paal), 1891, A., 724.
2′-**Phenyldihydroindole** (Fischer and Schmidt), 1888, A., 699.
Phenyldihydro-*β*-naphthatriazine (Goldschmidt and Poltzer), 1891, A., 840.
Phenyldihydro-*β*-phenotriazine (Busch), 1892, A., 734.
Phenyldihydroquinazoline (Paal and Busch), 1890, A., 72.
Phenyldihydroquinolylmethane (Einhorn), 1886, A., 720.
Phenyl*iso*dihydroxybutyric acid (Fischer and Stewart), 1892, A., 1448.
Phenyl*iso*dihydroxybutyric acid, salts of (Fittig and Obermüller), 1892, A., 987.
Phenyldihydroxyphenylmethanedicarboxylic acids, *o*-, *m*- and *p*-nitro- (de Varda), 1892, A., 621.
ω-**Phenyl-*αβ*- and -*αω*-diketobutane** (Müller and v. Pechmann), 1889, A., 1171.
Phenyldiketodimethylanilidopiperidinecarboxylic acid (Reissert), 1888, A., 697.
Phenyldiketomethylanilido-*mono*- and *di*-bromopyrrolidines (Reissert), 1890, A., 642.
Phenyldiketomethylanilido*di*chloropyrrolidine (Reissert), 1890, A., 643.
Phenyl-*αδ*-diketopiperazine (Bischoff), 1889, A., 1015.
α-**Phenyl-*αω*-diketopropane.** See Phenyl methyl diketone.
Phenyldimethyl-. See also Xylyl-.
Phenyldimethylacetamidine, *s*- and *as*- (Luckenbach), 1884, A., 1135.
Phenyldimethylarsine, action of benzylidenic chloride on (Holle), 1892, A., 984.

Phenyldimethylethylammonium iodide (Claus and Howitz), 1884, A., 1005.
  tri-, *penta-*, and *hepta-*iodides (Geuther), 1887, A., 910.
2-**Phenyl-4:5-dimethylglyoxaline** (Wadsworth), 1890, T., 9.
4-**Phenyl-2:6-dimethylhexahydropyridine** (*phenyllupetidine*) (Bally), 1888, A., 65.
4-**Phenyl-2:6-dimethylhexahydropyridinedicarboxylic acid** (Kirchner), 1892, A., 1487.
Phenyldimethyloctohydrodiquinolylmethane, amido- (v. Miller and Plöchl), 1891, A., 1102.
n-**Phenyldimethylosotriazole** (Baltzer and v. Pechmann), 1891, A., 1115.
Phenyldimethylosotriazone (v. Pechmann), 1888, A., 1288.
1-**Phenyl-3:5-dimethylpyrazole** (Combes), 1889, A., 57.
  4-bromo- (Balbiano), 1890, A., 1165.
1-**Phenyl-3:5-dimethylpyrazole-4-carboxylic acid** (Knorr), 1887, A., 678.
1-**Phenyl-3:5-dimethylpyrazole-1-sulphonic acid** (Claisen and Roosen), 1891, A., 1107.
1-**Phenyl-2:3-dimethylpyrazolidone** (Knorr and Duden), 1892, A., 731.
1-**Phenyl-2:3-dimethylpyrazolone** (*antipyrin; dimethyloxyquinizine*) (Knorr), 1884, A., 1153, 1378; (Knorr and Bülow), 1884, A., 1382.
  See also Antipyrin.
1-**Phenyl-3:4-dimethylpyrazolone** (Knorr and Blank), 1884, A., 1380; (Knorr), 1887, A., 601; (Pellizzari), 1889, A., 518.
1-**Phenyl-2:3-dimethyl*iso*pyrazolone** (Lederer), 1892, A., 635.
1-**Phenyl-2:3-dimethylpyrazolone-4-tartronyl-imide** and **-carbamide** (Pellizzari), 1889, A., 517.
Phenyldimethylpyridazine (Knorr), 1885, A., 995.
Phenyldimethylpyridazinedicarboxylic acid. See 1-Phenylamido-2:5-dimethylpyrroline-3:4-dicarboxylic acid.
4-**Phenyl-2:6-dimethylpyridine** (*phenyllutidine*) (Bally), 1888, A., 65.
  m-amido- (Lepetit), 1887, A., 1053.
4-**Phenyl-2:6-dimethylpyridine-3-carboxylic acid** and its derivatives (Hantzsch), 1885, A., 397.
4-**Phenyl-2:6-dimethylpyridine-3:5-dicarboxylic acid** (Kirchner), 1892, A., 1486.
  m-amido- (Lepetit), 1887, A., 1053.
Phenyl-β-dimethylpyridinedicarboxylic acid (Reed), 1887, A., 681.
4-**Phenyl-1:6-dimethyl-2-pyridone** (*methylated ψ-carbostyril of phenylpicoline*) (Hantzsch), 1885, A., 398.
Phenyl-2:6-dimethylpyridone (*phenyllutidone*) (Perkin), 1887, T., 499; (Conrad and Guthzeit), 1887, A., 501.
Phenyl-2:6-dimethylpyridone-*mono*- and *-di*-carboxylic acids (Conrad and Guthzeit), 1887, A., 500.
1-**Phenyl-2:5-dimethylpyrroline** (Knorr), 1887, A., 275.
1-**Phenyl-2:5-dimethylpyrroline-3:4-dicarboxylic acid** (Knorr), 1885, A., 555.
2′-**Phenyl-1′:4′-dimethylquinolinium hydroxide** (*methylflavolinium hydroxide*) (Bernthsen and Hess), 1885, A., 559.
Phenyldimethylquinoxaline (Müller and v. Pechmann), 1889, A., 1171.
Phenyldimethylsulphonediamide (Behrend), 1884, A., 285.
Phenyldimethyltetrahydronaphthalene (Erdmann), 1885, A., 528.
Phenyldimethylthiocarbamide (Dixon), 1892, T., 539.
s-**Phenyldimethylthiocarbamide** (Gebhardt), 1885, A., 383.
Phenyldimethylthiohydantoin (Marckwald, Neumark and Stelzner), 1892, A., 150.
1-**Phenyl-4-dimethyl-2-thiomethoxyglyoxaline** (Marckwald, Neumark and Stelzner), 1892, A., 153.
Phenyldimethylurazole (Pinner), 1888, A., 688.
Phenyldiorcinolmethane, *m*-nitro- (Bertoni), 1891, A., 1378.
Phenyldiphloroglucinolmethane, *m*-nitro- (Bertoni), 1891, A., 1378.
Phenyldipiperidyl, *p*-nitro-, and *o:p*-*di*nitro- (Lellmann and Just), 1891, A., 1245.
Phenyldipropyl-carbamide, **-guanidine** and **-thiocarbamide** (Francksen), 1884, A., 1008.
Phenyldiquinolylmethane, *p*-nitro- (Einhorn), 1886, A., 720.
Phenyldiresorcinolmethane, *m*-nitro- (de Varda and Zenoni), 1891, A., 1346.
Phenyldithienyl (Renard), 1890, A., 1420.
  *tri*bromo- and *di*nitro- (Renard), 1890, A., 1420.
Phenyldithienyldisulphonic acid (Renard), 1890, A., 1421.

Phenyldithymolmethane (Russanoff), 1889, A., 1188; 1891, A., 1235.
Phenyl-*p*-ditolylbiuret (Kühn and Henschel), 1888, A., 474.
Phenyl-*p*-ditolylcarbamide (Hammerich), 1892, A., 1083.
s-**Phenyldi-*o*-tolylguanidine** (Huhn), 1886, A., 1036.
Phenylditolylmethane, *m*-nitro- (Tschacher), 1887, A., 44; 1888, A., 373.
Phenylditolylphosphine (Dörken), 1888, A., 833.
Phenyldi-*p*-tolyltriazole (Bladin), 1890, A., 271.
Phenyldi-*p*-xylylmethane (Elbs), 1887, A., 941.
Phenyldixylyl-β-pinacoline (Elbs), 1887, A., 941.
Phenyldulcitosazone (Fischer and Tafel), 1888, A., 358.
Phenyl*iso*durylcarbinyl benzoate and acetate (Essner and Gossin), 1885, A., 253.
Phenyl*iso*durylglycollic acid (Essner and Gossin), 1885, A., 253.
o-**Phenylene hydrogen antimonite** (Causse), 1892, A., 1078.
Phenyleneamidinebenzenyl-*o*-carboxylic acid (Bistrzycki), 1890, A., 970.
Phenylene-*p*-amidobenzoylurethane (Hager), 1885, A., 150.
Phenylene*di*amidodiacetic acid (*phenylenediglycocine*), hydrochloride of (Zimmermann and Knyrim), 1883, A., 797.
Phenylenebenzenyldiamine (Auwers and v. Meyenburg), 1891, A., 1378.
  ethyl-derivative and nitrile of (Howe), 1884, A., 741.
Phenylene*di*bromacetylene ketone. See Ketoindene, *di*bromo-.
Phenylenecarbamide (*amidocarbamidophenol*) (Kalckhoff), 1883, A., 1110.
  amido- (Jentzsch), 1889, A., 46.
Phenylene*tri*chlorethylene ketone. See Ketohydrindene, *tri*chloro-.
Phenylene*tetra*chlorethylene ketone. See Ketohydrindene, *tetra*chloro-.
Phenylene*tri*chlorethyleneglycollic acid (Zincke), 1888, A., 158.
Phenylene*di*chloro*di*bromethylene ketone. See Ketohydrindene, *di*chloro*di*bromo-.
Phenylenechlorohydroxyacetylene ketone (Zincke), 1887, A., 728.
Phenylene-*p*-diacetamidine (Glock), 1888, A., 1290.
o-**Phenylenediacetic acid** (v. Baeyer and Pape), 1884, A., 898.
Phenylenediacetic acids, *m*- and *p*- (Kipping), 1888, T., 42.
Phenylene-*p*-diactiemidoethyl ether (Glock), 1888, A., 1290.
p-**Phenylenediacryl methyl ketone** (Löw), 1886, A., 461.
o-**Phenylenediacrylic acid** (Perkin), 1886, A., 469; 1888, T., 14.
p-**Phenylenediacrylic acid** (Löw), 1886, A., 461; (Kipping), 1888, T., 41.
o-**Phenylenediallyl*di*thiocarbamide** (Lellmann and Würthner), 1885, A., 977.
Phenylenediamine (*diamidobenzene*), azo- and diazo-derivatives of (Wallach and Schulze), 1883, A., 583.
o-**Phenylenediamine,** preparation of (Lellmann), 1884, A., 49.
  action of cyanogen on (Bladin), 1885, A., 257, 785.
  action of ferric chloride on (Wiesinger), 1884, A., 1322.
  action of formaldehyde on (Fischer and Wreszinski), 1892, A., 1496.
  oxidation of (Fischer and Hepp), 1889, A., 499; 1890, A., 800.
  detection of, in *m*:*p*-tolylenediamine (Hinsberg), 1885, A., 934.
"*o*-**Phenylenediamine,** *di*cyano-" (Bladin), 1885, A., 257, 785.
m-**Phenylenediamine,** preparation of, from resorcinol (Seyewitz), 1890, A., 245.
  action of carbon *di*sulphide on (Gucci), 1885, A., 156; 1886, A., 1023; 1888, A., 588.
  condensation of, with œnanthaldehyde (v. Miller), 1891, A., 1103.
  physiological action of (Dubois and Vignon), 1889, A., 66.
  preservation of solutions of, and its use as a reagent (Denigès), 1892, A., 1124.
  *di*nitro- [m.p. 250°] (Barr), 1888, A., 823.
    [m.p. 300°] (Nietzki and Hagenbach), 1887, A., 477.
  *tri*nitro- (Nölting and Collin), 1884, A., 1004; (Barr), 1888, A., 823.
p-**Phenylenediamine,** preparation of (Lellmann), 1884, A., 49.
  nitration of (Ladenburg), 1884, A., 738.
  oxidation of (v. Bandrowski), 1889, A., 973.
  physiological action of (Dubois and Vignon), 1889, A., 66.
  salts, heat of formation of (Vignon), 1888, A., 1012.

p-**Phenylenediamine,** *di*chloro-, hydrochloride (Möhlau), 1886, A., 941.

Phenylenediamines and their derivatives (Lellmann), 1883, A., 324.
  thermochemistry of (Vignon), 1889, A., 1099.
  condensation of, with acetaldehyde (Schiff and Vanni), 1890, A., 139.
  condensation of, with butaldehydes (Lassar-Cohn), 1890, A., 138.
  action of *p*-diazobenzenesulphonic acids on (Griess), 1883, A., 183.
  action of ethylic chloracetate on (Zimmermann and Knyrim), 1883, A., 797.
  mono-additive products of phenylic cyanate and (Lellmann and Würthner), 1885, A., 978.
  benzyl derivatives of (Meldola and Coste), 1889, T., 590; P., 116.
  cyanic acid derivatives of (Lellmann), 1883, A., 798.

p-**Phenylenediaminedibenzylidenesulphonic acid,** sodium salt of (Kafka), 1891, A., 721.

o-**Phenylenediaminesulphonic acid** (Nietzki and Lerch), 1889, A., 144.

o-**Phenylenediamine-*p*-sulphonic acid** (Lerch), 1889, A., 881.

2:5-**Phenylenediaminethiosulphonic acid** (Bernthsen), 1889, A., 777.

o-**Phenylenediazosulphide** (Jacobson), 1889, A., 135.

Phenylenediazosulphidecarboxylic acid (Pfitzinger and Gattermann), 1889, A., 868.

Phenylenedibenzyldiacetic acid (Meyer and Oelkers), 1888, A., 704.

Phenylenedicarbamides, three isomeric (Lellmann), 1883, A., 798.

Phenylenediethyldisulphone (Otto and Casanova), 1888, A., 255.

Phenylenediglycocine. See Phenylene*di*amidodiacetic acid.

p-**Phenylenedimethylaminediethylmethylphosphonium iodide** (Michaelis and Schenk), 1891, A., 436.

p-**Phenylenedimethylaminediethylphosphine** and its oxide and sulphide (Michaelis and Schenk), 1891, A., 436.

p-**Phenylenedimethylaminedimethylphosphine** and its oxide and sulphide (Michaelis and Schenk), 1891, A., 435.

p-**Phenylenedimethylaminediphenylmethylphosphonium iodide** and *p*-**phenylenedimethylaminediphenylphosphine oxide** and **sulphide** (Michaelis and Schenk), 1891, A., 436.

Phenylenedimethylaminephenylmethylphosphine oxide and **phenylenedimethylamine-triethyl-** and **-trimethyl-phosphonium iodides** (Michaelis and Schenk), 1891, A., 435.

m-**Phenylenedimethyldinitramine,** *tri*nitro- (van Romburgh), 1888, A., 1079, 1185.

o-**Phenylenedipropionic acid** (Perkin), 1886, A., 469; 1888, T., 18.

Phenylenedipropionic acids, *m*- and *p*- (Kipping), 1888, T., 32, 39.

Phenylene-ethenylamidine, nitro- (*nitrethenyl-o-phenylenediamine*) (Heim), 1888, A., 1097.

Phenylene-ethenylethylamidine (*ethenylethyl-o-phenylenediamine*) (Hempel), 1889, A., 600; 1890, A., 612.

Phenylene-ethyl-*o*-diamines (*amidoethylaniline*) (Hempel), 1889, A., 600; 1890, A., 612.

Phenylene-ethyl-*m*-diamine (Nölting and Stricker), 1886, A., 545.

Phenylene-ethyl-*p*-diamine (Schweitzer), 1886, A., 347; (Fischer and Hepp), 1887, A., 244.

o-**Phenylene-ethylenediamine** and its derivatives (Merz and Ris), 1887, A., 722; (Ris), 1888, A., 468.

Phenylene-ethylenedisulphone (Otto and Casanova), 1888, A., 256.

Phenylenehydroxylamine, *di*nitro- (Willgerodt), 1892, A., 594.

Phenylene*di*imidobutyric acid, synthesis of (Knorr), 1884, A., 1198.

o-**Phenylenemethyldiamine** (Fischer), 1892, A., 1475.

m-**Phenylenemethyldiamine** (Nölting and Stricker), 1886, A., 544.

p-**Phenylenemethyldiamine** (Bernthsen and Goske), 1887, A., 667.

Phenylenemethylethenylamidine (Fischer), 1892, A., 1475.

β-**Phenylenenaphthylenemethane oxide** (Phomina), 1890, A., 901.

Phenylene-*β*-naphthylethenyldiamine, nitro- (Heim), 1888, A., 488.

m-**Phenyleneoxy*tri*chlorethylene** (Michael), 1886, A., 614.

Phenylenepropenyldiamine, action of bromine on (Smith), 1885, A., 524.

Phenylenepropyldiamine (Wacker), 1888, A., 466.

Phenylenepropylenediamine (Ris), 1888, A., 468.

Phenylenepyridineketonedicarboxylic acids, *α*- and *β*- (Doebner and Peters), 1890, A., 1008.
  formation of, by the oxidation of naphthaquinoline derivatives (Doebner and Peters), 1890, A., 1007.

Phenylenequinaldine. See Phenyl-2′-methylquinoline.

m-**Phenylenesuccinamic acid** (Griess), 1885, A., 1220.

Phenylenetetramethyl-. See Tetramethylphenylene-.

o-**Phenylenethiocarbamide** (Lellmann), 1883, A., 324; 1884, A., 49.

Phenylenethiocarbamides (Lellmann), 1883, A., 185; (Billeter and Steiner), 1887, A., 366.

Phenylene*di***thiocarbamides** and their derivatives (Lellmann), 1883, A., 324; 1884, A., 49.

o-**Phenylene**-*p*-**tolylguanidine** (Keller), 1891, A., 1470.

p-**Phenyleneurethane** (Gattermann and Wrampelmeyer), 1886, A., 50.

Phenylenic carbamates, *o*-, *m*-, and *p*- (Gattermann), 1888, A., 575.

Phenylenic cyanates, *m*- and *p*- (Gattermann and Wrampelmeyer), 1886, A., 50.

Phenylenic oxide (Vaubel), 1892, A., 1187.

p-**Phenylenic** *di***sulphide** (Leuckart), 1890, A., 605.

m-**Phenylenic** *o*-**tolylcarbamate** (Gattermann and Cantzler), 1892, A., 832.

Phenylethenyl*di***amidoacetone** (Rügheimer and Mischel), 1892, A., 952.

Phenylethenylamidoxime, and its derivatives (Knudsen), 1885, A., 897, 1218.
  p-cyano- (Rosenthal), 1890, A., 147.

Phenylethenylamidoximebenzenesulphone (Pinnow), 1892, A., 461.

Phenylethenylazidine hydrochloride (Pinner), 1884, A., 1323.

Phenylethenylazo-. See Azo.

Phenylethenylphenyluramidoxime (Knudsen), 1885, A., 898.
  ethyl ether (Knudsen), 1885, A., 1218.

Phenylethoxynaphthalene, *di*amido- (Weinberg), 1888, A., 286.

Phenylethylacetanilide, β-bromo- (Elfeldt), 1892, A., 214.

Phenylethylacetic acid (Neure), 1889, A., 597.

Phenylethylallylthiocarbamide (Gebhardt), 1885, A., 383.

Phenylethylamidoacetic acid (Heumann), 1891, A., 837.

Phenylethylamidobenzeneazophenylethylaniline (Lippmann and Fleissner), 1884, A., 180.

α-**Phenylethylamine** (Tafel), 1886, A., 940.
  derivatives (Tafel), 1889, A., 976.

ω-**Phenylethylamine** (Erlenmeyer and Lipp), 1883, A., 993.
  preparation of (Hoogewerff and van Dorp), 1887, A., 245.
  oxalate (Hoogewerff and van Dorp), 1888, A., 1196.

as-**Phenylethylcarbamide** (Gebhardt), 1884, A., 1321.

Phenylethylcarbinol (Errera), 1887, A., 35.

Phenylethylene. See Styrene.

Phenylethylene-carbamide and **-thiocarbamide** (Newman), 1891, A., 1206.

Phenylethylenediamine (Gabriel), 1889, A., 1166.

Phenylethyl-hydantoin and **-ψ-hydantoin** (Pinner), 1888, A., 1103.

Phenylethylhydrazine acetoacetate, action of hydrocyanic acid on (v. Miller and Plöchl), 1892, A., 1196.
  o-amido- (Hempel), 1890, A., 612.

Phenylethylhydrazine-glyoxal and **-glyoxylic acid** (Elbers), 1885, A., 535.

Phenylethylhydrazone, thionyl- (Michaelis), 1889, A., 1163.

Phenylethylic alcohol, oximido- (Meyer and Nägeli), 1883, A., 1076.

Phenylethylic salicylate, *o*-nitro- (*salicylethylene nitrophenol ether*) (Wagner), 1884, A., 436.

Phenylethylidene cyanhydrin (Erlenmeyer and Lipp), 1883, A., 992.

Phenylethylidenebenzenylamidoxime (Zimmer), 1890, A., 253.

Phenylethylketone-*o*-**carboxylic acid** (*benzoylethyl-o-carboxylic acid*) (Roser), 1886, A., 243.

Phenylethyllactic acid, behaviour of (Slocum), 1885, A., 662.

β-**Phenyl**-α-**ethyllactic acid** (Perkin and Stenhouse), 1891, P., 43.

Phenylethylmalonamide (Freund and Goldsmith), 1888, A., 676.

Phenylethylnitrosamine, *p*-nitro- (Meldola and Streatfeild), 1886, T., 631.

5-**Phenyl**-1-**ethyloxy**-ψ-**thiazole** (Hubacher), 1891, A., 222.

Phenylethylphenol. See Hydroxydiphenylethane.

Phenylethylphenylthiocarbamide (Mainzer), 1883, A., 1106.

Phenylethylphthalamic acid and its salts (Piutti), 1884, A., 449.

Phenylethylpropionic acid, preparation and properties of (Anschütz and Berns), 1891, A., 914.

1:5-Phenylethylpyrazole (Claisen and Stylos), 1888, A., 671.
Phenylethylsemithiocarbazide (Dixon), 1889, T., 302.
Phenylethylsulphone (Otto), 1885, A., 537.
α-**Phenyl-*μ*-ethylthiazole** (Hubacher), 1891, A., 221.
Phenylethylthiobiuret (Tursini), 1884, A., 1141.
Phenylethylthiocarbamide (Neubert), 1886, A., 873.
as-**Phenylethylthiocarbamide** (Gebhardt), 1884, A., 1321.
Phenylethylthiocarbamine chloride and oxide (Billeter), 1887, A., 822.
Phenylethylthiocarbimide (Neubert), 1886, A., 873.
Phenylethylthiohydantoin hydrochloride (Neubert), 1886, A., 873.
2-Phenyl-4-ethylthiophen (Dittrich and Paal), 1889, A., 258.
Phenylethyltriazolecarboxylic acid (Bladin), 1892, A., 637.
Phenylethylurethane, nitro- (Steudemann), 1883, A., 802.
Phenylfenchylamine (Wallach), 1891, A., 1088.
Phenylformamidine, cyano- (Comstock and Wheeler), 1892, A., 707.
Phenylfurazan (Russanoff), 1892, A., 322.
α-**Phenylfurfuracrylonitrile** (Frost), 1889, A., 598.
  p-amido-, and *p*-nitro- (Freund and Immerwahr), 1890, A., 1408.
Phenylfurfuryl-carbamide and -thiocarbamide (Deutzmann), 1892, A., 43.
Phenylgalactosazone (Scheibler), 1884, A., 1287; (Fischer), 1885, A., 54.
Phenylglucosazone (Fischer), 1885, A., 53; 1886, A., 933.
Phenylglucosazonecarboxylic acid (Roder), 1887, A., 150.
Phenylglutaric acid (Michael), 1887, A., 672.
β-**Phenylglyceric acid** (*αβ-dihydroxyphenylpropionic acid*) (Lipp), 1883, A., 994; (Fittig and Ruer), 1892, A., 986.
Phenylglycerol (*dihydroxyphenoxypropane*) (Lindemann), 1891, A., 1198.
Phenylglycerosazone (Fischer and Tafel), 1887, A., 651.
Phenylglycidic acid (*β-phenylhydroxyacrylic acid*) (Plöchl), 1884, A., 604; 1887, A., 254; (Erlenmeyer), 1887, A., 142, 1046; (Wislicenus), 1887, A., 587.
Phenylglycidic acid (*β-phenylhydroxyacrylic acid*), synthesis of (Erlenmeyer), 1889, A., 990.
  sodium salt of, behaviour of ammonia and organic bases with (Erlenmeyer), 1889, A., 988.
  o- and *p*-nitro- (Lipp), 1887, A., 142.
Phenylglycidic acids, optically active (Erlenmeyer), 1891, A., 1482.
o-**Phenylglycincarboxylic acid.** See Carboxyanilidoacetic acid.
Phenylglycinmethylanilide. See Phenylamidoacetomethylanilide.
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- **Phenylhydrazinesulphonic acid,** *di*bromo- (Limpricht), 1889, A., 398.
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Phenylimidobenzoin (Voigt), 1886, A., 887.
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Phenyl-β-imidobutyric acid, synthesis of (Knorr), 1884, A., 1198.
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Phenylimidocarbonyl chloride (Nef), 1892, A., 1439.
Phenylimidocyanamide (Pellizzari and Tivoli), 1892, A., 1323.
Phenylimidodiacetic acid (Bischoff and Nastvogel), 1889, A., 1013.
Phenylimidodiacetic anhydride (Bischoff and Hausdörfer), 1892, A., 1334.
Phenylimidodiacetic anilide and **di-anilide** (Hausdörfer), 1889, A., 1014.
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Phenylimidoguanidine (Pellizzari), 1891, A., 1471.
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Phenylimidomethylpropionylacetonitrile (Bouveault), 1891, A., 52.
Phenylimidomucohydroxy-bromic and **-chloric acids** (Hill and Palmer), 1888, A., 452.
Phenylimidophenyl (Seifert), 1890, A., 490.
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  condensation of (Böttinger), 1892, A., 54.
  bromo-derivative of (Böttinger), 1883, A., 1128.
Phenylimidopropionic chloride (Nef), 1892, A., 1440.
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α-**Phenylimidopropionitrile** (Erlenmeyer and Lipp), 1883, A., 992.
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μ-**Phenylimidothiazoline** (Näf), 1891, A., 1517.
2′-**Phenylindazine** (Paal), 1891, A., 723.
  p-chloro- (Paal), 1891, A., 724.
1′-**Phenylindazine-3′-carboxylic acid**, nitro-, action of stannous chloride on (Schulhöfer), 1891, A., 1231.
1′-**Phenyl-ψ-indazine-3′-carboxylic acid**, nitro- (Meyer), 1889, A., 517.

1′-**Phenylindole** (Pfülf), 1887, A., 956.
2′-**Phenylindole** and its derivatives (Etard), 1883, A., 179; (Pictet), 1886, A., 711; (Fischer and Schmidt), 1888, A., 698; (Bischler), 1892, A., 1465.
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3′-**Phenylindole** (Fischer and Schmidt), 1888, A., 958.
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1′-**Phenylindole-3′-carboxylic acid**, synthesis of (Fischer and Hess), 1884, A., 1181.
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3′-**Phenyl-2′-ketodihydroquinazoline** (Söderbaum and Widman), 1890, A., 178.
3′-**Phenyl-4′-ketodihydroquinazoline** (Paal and Busch), 1890, A., 72; (Paal and Krecke), 1892, A., 81.
3′-**Phenyl-4′-ketodihydroquinazoline-2′-carboxylic acid** (Paal and Krecke), 1892, A., 81.
3′-**Phenyl-4′-ketohydrazodihydroquinazoline** (Paal and Busch), 1890, A., 72.
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1-**Phenylketopyrazolone 4-phenylhydrazone** (Knorr), 1888, A., 724.
1-**Phenylketopyrazolone-3-carboxylic acid 4-phenylhydrazone** (Knorr), 1888, A., 724.
3′-**Phenyl-2′-ketotetrahydroquinazoline** and its derivatives (Söderbaum and Widman), 1889, A., 973; (Nietzki), 1890, A., 178; (Paal and Bodewig), 1891, A., 944; (Busch), 1892, A., 1495.
Phenyl-α-lactic acid, β-amido- (Erlenmeyer), 1889, A., 988.
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Phenyllactimide (Erlenmeyer and Lipp), 1883, A., 993.
Phenyl-α-lactonitrile (Erlenmeyer and Lipp), 1883, A., 992.
Phenyllactosazone (Fischer), 1885, A., 54; 1887, A., 567.
Phenyl-β-lacturamic acid (Hoogewerff and van Dorp), 1891, A., 197.
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α-**Phenyllevulinic acid** (Fittig and Stern), 1892, A., 988.
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Phenylmelilotic acid, synthesis of (Sardo), 1884, A., 176.
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Phenylmercaptomethylmercaptan, amido- (Jacobson and Frankenbacher), 1891, A., 1048.

Phenylmesitylenylcarbinol (*phenyltrimethylphenylcarbinol*) and its derivatives (Louïse), 1886, A., 542.

Phenylmethaneazobenzene, *o*-nitro- (Paal and Bodewig), 1892, A., 1456.

Phenylmethenylazidine (Fischer), 1889, A., 1164.

Phenylmethenylhydroxyamidine (*hydroxyphenylformamidine*) (Comstock and Clapp), 1892, A., 708.

Phenylmethoxytolylethanes (Koenigs and Carl), 1892, A., 446.

Phenylmethylacridine (Bonna), 1887, A., 928.
 ethoxide and hydroxide (Decker), 1892, A., 881.

Phenylmethylacrylic acid. See Phenylcrotonic acid.

Phenylmethylallylpyrroline (Lederer and Paal), 1886, A., 75.

Phenylmethylallylpyrrolinecarboxylic acid, and its ethylic salt (Lederer and Paal), 1886, A., 75.

Phenylmethylamidobenzeneazo*tri***bromobenzene** (Silberstein), 1883, A., 662.

Phenylmethylamidobenzeneazodiphenylmethylamine (Lippmann and Fleissner), 1884, A., 180.

Phenylmethylamidobenzenephosphinic acid and chloride (Michaelis and Schenk), 1891, A., 437.

α-Phenyl-μ-methylamidothiazole (Traumann), 1889, A., 415.

Phenylmethylanthracene (v. Hemilian), 1884, A., 322.

Phenylmethylanthranol (v. Hemilian), 1884, A., 322; 1887, A., 266.

Phenylmethylbiazoline (Freund and Kuh), 1890, A., 1442.

Phenyl-α-methyl-β-bromacrylic acid (Körner), 1889, A., 372.

as-**Phenylmethylcarbamide** (Gebhardt), 1884, A., 1321.

Phenylmethyl*di***chlorobiazolone** (Freund and Kuh), 1890, A., 1441.

Phenylmethylchloroformamide, compounds from (Lellmann and Benz), 1891, A., 1214.

2′-Phenyl-1- and -3-methyl-4′-cinchonic acids (Doebner and Gieseke), 1888, A., 300.

Phenyl-α- and -β-methyl*iso***crotonic acids** (*phenylpentenoic acid*) (Fittig and Liebmann), 1890, A., 775.

Phenylmethylcyantriazole (Bladin), 1887, A., 138.

2-Phenyl-6-methyl-*m*-diazine, amido-, and *di*amido- (Pinner), 1887, A., 1054.

Phenylmethyldihydro-β-naphthatriazine, and methiodide of (Goldschmidt and Poltzer), 1891, A., 840, 841.

3′-Phenyl-2′-methyldihydroquinazoline (Paal and Krecke), 1890, A., 1443; 1892, A., 81.

Phenylmethyldihydroxyglutaric acid (*dihydroxyphenylmethylglutaric acid*) (Carlson), 1892, A., 1471.

Phenylmethyldiphenylazimethylene (Curtius and Pflug), 1892, A., 457.

Phenylmethylenehydrazine (Curtius and Pflug), 1892, A., 456.

Phenylmethylethylalkine. See Hydroxyethylmethylaniline.

Phenylmethylethylenediamine (Newman), 1891, A., 1208.

n-**Phenylmethylethylosotriazole** (Baltzer and v. Pechmann), 1891, A., 1116.

1-Phenyl-4-methyl-3-ethylpyrazole (Claisen and Meyerowitz), 1890, A., 358.
 5-amido- (Bouveault), 1891, A., 52.

1-Phenyl-4-methyl-5-ethylpyrazole platinochloride (Balbiano), 1892, A., 885.

1-Phenyl-3-methyl-4-ethylpyrazolone (Knorr and Blank), 1884, A., 1380.

Phenylmethylethylthiocarbamide (Gebhardt), 1885, A., 383; (Billeter), 1887, A., 823.

Phenylmethylfumaramic acid (Piutti), 1886, A., 792.

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Phenylmethylfurfuran and its derivatives (Paal), 1885, A., 248; (Schloesser), 1889, A., 595.

Phenylmethylfurfurancarboxylic acid (Paal), 1885, A., 249.
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Phenylmethylfurfurandicarboxylic acid (*phenythronic acid*) (Fittig and Schloesser), 1888, A., 1089; (Schloesser), 1889, A., 595.

Phenylmethylglucosazone (Fischer), 1889, A., 484.

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2:5-Phenylmethylglyoxaline (Lewy), 1888, A., 1102.

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Phenylmethylhydantoin (Pinner), 1888, A., 1103.

Phenylmethylhydrazine and its salts (Erlenmeyer), 1883, A., 1103; (Tafel), 1885, A., 1061; (Fischer), 1887, A., 138.
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o-amido- (Hempel), 1890, A., 613.
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1:5-**Phenylmethylhydro***iso***pyrazolone** (Lederer), 1892, A., 635.
2′-**Phenyl-3′-methylhydroquinoline,** *m*-amido- (v. Miller and Kinkelin), 1886, A., 561.
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α-**Phenylmethyl-μ-imidothiazoline** (Traumann), 1889, A., 415.
2′-**Phenyl-1-methylindole** (Bischler), 1892, A., 1465.
2′-**Phenyl-3-methylindole** (Bischler), 1892, A., 1466.
2′-**Phenyl-1′-methylindole** (Degen), 1887, A., 149; (Staedel), 1888, A., 1093.
3′-**Phenyl-1′-methylindole** (Ince), 1890, A., 57.
3′-**Phenyl-2′-methylindole** (Trenkler), 1889, A., 260.
3′:2′-**Phenylmethyl-4′-ketodihydroquinazoline** (Paal and Krecke), 1892, A., 81.
1-**Phenyl-3-methylketopyrazolone-4-hydrazone** (Knorr), 1888, A., 724.
Phenylmethylketoxime-*o*-carboxylic acid, anhydride of (Gabriel), 1883, A., 1128.
β-**Phenyl-α-methyllactic acid.** See Hydroxy-β-phenyl-α-methylpropionic acid.
Phenylmethylmethylenebisthioglycollic acid (Bongartz), 1888, A., 479.
1-**Phenyl-3-methyl-4-methylenehydrazine** (Curtius and Pflug), 1892, A., 457.
1-**Phenyl-3-methyl-4-methylenepyrazolone** (Pellizzari), 1889, A., 518.
Phenyl-*ald*-methylnaphthatriazine, *az-p*-nitro- (Meldola and Forster), 1891, T., 697.
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Phenylmethyl-β-naphthylamine, thio- (Kym), 1890, A., 1307.
Phenylmethylnitramine, 2:3:4:6-*tetra*nitro-, and its conversion into *m*-phenylenediamine derivatives (van Romburgh), 1889, A., 1154.
Phenylmethylnitrosamine, constitution of (Erlenmeyer), 1883, A., 1103.
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n-**Phenylmethylosotriazole** and its derivatives (Jonas and v. Pechmann), 1891, A., 1111.
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n-**Phenylmethylosotriazolesulphonic acid** (Jonas and v. Pechmann), 1891, A., 1112.
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Phenylmethylparaconic acids, α- and β- (Fittig and Liebmann), 1890, A., 775.
Phenyl-α-methylpiperidine, *o:p*-*di*nitro- (Lellmann and Just), 1891, A., 1245.
Phenyl-β-methylpiperidine, *p*-nitro-, and *o:p*-*di*nitro- (Lellmann and Büttner), 1890, A., 1003.
Phenylmethylpropionic acid. See Methylhydrocinnamic acid and Tolylpropionic acid.
Phenylmethylpropylalkine. See Hydroxypropylmethylaniline.
1-**Phenyl-3-methyl-4-*iso*propylenepyrazolone** (Knorr), 1887, A., 602.
Phenylmethylpropylene-ψ-thiocarbamide (Prager), 1890, A., 159.
1-**Phenyl-3-methylpyrazole** (Claisen and Stylos), 1888, A., 671; (Ach), 1890, A., 71; (Claisen and Roosen), 1891, A., 1106.
1-**Phenyl-5-methylpyrazole** (Knorr and Laubmann), 1889, A., 410; (Claisen and Roosen), 1891, A., 1106.
1-**Phenyl-3-methylpyrazole-5-carboxylic acid** (Ach), 1890, A., 71.
1-**Phenyl-5-methylpyrazole-3-carboxylic acid** (Claisen and Stylos), 1888, A., 676; (Claisen and Roosen), 1891, A., 1107.

1-Phenyl-5-methylpyrazole-3:4-dicarboxylic acid (Knorr and Laubmann), 1888, A., 410.

1-Phenyl-3-methylpyrazolidone (Knorr and Duden), 1892, A., 731.

1-Phenyl-3-methylpyrazolone and its derivatives (Knorr), 1884, A., 1103; 1887, A., 601; (Möllenhoff), 1892, A., 1245.
  action of sulphur *di*chloride on (Sprague), 1891, T., 334.
  4-*mono*- and *di*-bromo- (Knorr and Duden), 1892, A., 731.
  4-*di*bromo-*p*-bromo- (Knorr and Duden), 1892, A., 731; (Möllenhoff), 1892, A., 1246.
  4-nitro- (Knorr), 1884, A., 302, 1153, 1378; 1887, A., 602; (Knorr and Duden), 1892, A., 731.
  4-oxime (Knorr), 1887, A., 602.
  4-thio- (*4-thiobis-1-phenyl-3-methylpyrazolone*) (v. Buchka and Sprague), 1890, A., 796; (Michaelis), 1890, A., 1269; (Sprague), 1891, T., 332, 335.

Phenylmethyl*iso*pyrazolones, 1:2- and 1:5- (Lederer), 1892, A., 635.

1-Phenyl-3-methylpyrazolone-4-acetic acid (Knorr and Blank), 1884, A., 1380.

Phenylmethylpyrazoloneazobenzene. See under Azo-.

1-Phenyl-3-methylpyrazolone-4-carbinol and **-4-malonylcarbamide** (Pellizzari), 1889, A., 518.

1-Phenyl-3-methylpyrazolone-4-ketophenylhydrazone (v. Buchka and Sprague), 1890, A., 28.

1-Phenyl-3-methylpyrazolone-*p*-sulphonic acid (Möllenhoff), 1892, A., 1245.

1-Phenyl-3-methylpyrazolone-*p*-sulphonic chloride, 4-*di*chloro- (Möllenhoff), 1892, A., 1246.

Phenyl-α-methylpyridazone, and γ-chloro- (Ach), 1890, A., 71.

4-Phenyl-2-methylpyrrodiazolone (Andreocci), 1890, A., 889.

1-Phenyl-2-methylpyrrolidone-2-carbonitrile and **-carboxylic acid** (Kühling), 1889, A., 1211, 1212.

Phenylmethylpyrroline, synthesis of (Paal), 1885, A., 516.

5-Phenyl-2-methylpyrroline-3-carboxylic acid (Lederer and Paal), 1886, A., 75.

γ-Phenyl-β-methyl- and **β-phenyl-γ-methyl-ψ-quinazolones** (Körner), 1887, A., 1045.

2′-Phenyl-1-methylquinoline (Doebner and Gieseke), 1888, A., 300.

2′-Phenyl-2-methylquinoline, *p*-amido- (Weidel and Bamberger), 1888, A., 966.

2′-Phenyl-3′-methylquinoline, 4-amido-. See Flavaniline.
  m-amido- and *m*-nitro- (v. Miller and Kinkelin), 1886, A., 561.

Phenyl-2′-methylquinoline, amido- (Schiff and Vanni), 1890, A., 1298.

4′-Phenyl-2′-methylquinoline (*phenylquinaldine*) and its derivatives (Geigy and Koenigs), 1885, A., 1236.
  synthesis of (Beyer), 1886, A., 630.

2′-Phenylmethylquinoxaline, constitution of (Lellmann and Donner), 1890, A., 525.

μ-Phenyl-α-methyl-selenazole and **-selenazole-β-carboxylic acid** (Hofmann), 1889, A., 727.

Phenylmethylsemithiocarbazides (Dixon), 1890, T., 261; P., 26; (v. Brüning), 1890, A., 23.

Phenylmethylsuccinic acids (Zelinsky and Buchstab), 1891, A., 1065.

Phenylmethylsulphonamic acid, ammonium salt of (Traube), 1891, A., 569.

Phenylmethylsulphone (Otto), 1885, A., 536.
  mono- and *di*-chloro- (Otto), 1888, A., 483; 1890, A., 380.
  iodo- (Michael and Palmer), 1885, A., 536.

Phenylmethyltaurine (*anilidoisethionic acid*) and its salts (Andreasch), 1883, A., 665.
  preparation of (James), 1885, T., 372; P., 47.

Phenyl-β-methyltaurocarbamic anhydride (Prager), 1890, A., 159.

Phenylmethyltetrahydrofurfuran (*phenylmethyltetramethylene oxide*) (Paal), 1885, A., 250.
  properties of (Colefax), 1891, T., 194.

Phenylmethyltetrahydroketoquinoxaline (Georgescu), 1892, A., 886.

1-Phenyl-2-methyltetrahydropyridine (Lipp), 1892, A., 1244.

3-Phenyl-1-methyltetrahydroquinoline, derivatives of (La Coste and Sorger), 1886, A., 81.

3′-Phenyl-2′-methyltetrahydroquinazoline (Paal and Krecke), 1892, A., 81.

α-Phenyl-μ-methylthiazole (Hantzsch), 1888, A., 574; 1889, A., 724.

μ-Phenyl-α-methylthiazole (Hubacher), 1891, A., 221.

μ-Phenylmethylthiazoline and its derivatives (Gabriel and Heymann), 1891, A., 701.

- **Phenylmethylthiocarbamides** (Gebhardt), 1884, A., 1321; 1885, A., 383.
- **Phenylmethylthiocarbamine chloride and oxide** (Billeter), 1887, A., 823.
- **Phenylmethylthiohydantoin** (Marckwald, Neumark and Stelzner), 1892, A., 150.
- 4:2-**Phenylmethylthiophen** and its derivatives (Paal and Püschel), 1887, A., 1101.
- 5:2-**Phenylmethylthiophen**, synthesis of (Paal), 1885, A., 516.
- **Phenylmethyl-*p*-toluamide** (Lellmann and Benz), 1891, A., 1215.
- **Phenylmethyltriazenylamidoxime** derivatives (Bladin), 1889, A., 977.
- **Phenylmethyltriazenylazoxime-benzenyl** and **-ethenyl** (Bladin), 1889, A., 978.
- **Phenylmethyltriazole** (Bladin), 1887, A., 139.
- **Phenylmethyltriazolecarboxylic acid** and its derivatives (Bladin), 1887, A., 138; 1890, A., 1165; 1891, A., 472.
- *p*-**Phenylmethyluramidobenzoic acid** (*p-phenylmethylglycoluric acid*) (Guareschi), 1892, A., 828.
- **Phenylmethylurethane** (Gebhardt), 1885, A., 384.
- **Phenylmethylxylylamide** (Lellmann and Benz), 1891, A., 1215.
- **Phenylmethyl-**. See also Methylphenyl-.
- 1-**Phenylmorpholine** (Knorr), 1889, A., 1219.
- α-**Phenyl-α-** and **-β-naphthacinchonic acids** (Doebner and Kuntze), 1889, A., 411.
- β-**Phenylnaphthalene** (Smith), 1889, P., 70.
- **Phenyl-β-naphthacridine** (Ris), 1884, A., 1357; (Claus and Richter), 1884, A., 1358.
- **Phenylnaphthaphenanthrazonium hydroxide** and its salts (Witt), 1887, A., 730.
- 2′-**Phenyl-α-** and **-β-naphthaquinolines** (Doebner and Kuntze), 1889, A., 411, 412.
- **Phenylnaphthaquinone** from the hydrocarbon $C_{16}H_{12}$ (Zincke and Breuer), 1885, A., 269.
- **Phenyl-β-naphthindoles**, 2′- and 3′- (Ince), 1890, A., 57.
- **Phenyl-β-naphthol**, *di*amido-, and 2:4-*di*nitro- (Ernst), 1891, A., 300.
- **Phenylnaphthostilborosindone** (Witt and Schmidt), 1892, A., 1247.
- **Phenylnaphthyl- acetic acid** and **-acetonitrile** (Michael and Jeanprêtre), 1892, A., 1094.
- **Phenyl-α-naphthylamine** (Friedländer), 1884, A., 80.
  - 2:4-*di*nitro- (Heim), 1888, A., 488, 1096.
  - (?)-4:2-nitramido- (Heim), 1888, A., 1096.
  - thio- (Kym), 1890, A., 1307.
- **Phenyl-β-naphthylamine** (Friedländer), 1884, A., 80.
  - action of oxalic acid on (Meldola), 1883, A., 807.
  - amido-. See Phenylnaphthylenediamine.
  - *di*amido- (Ernst), 1891, A., 301.
  - azo-derivatives of (Zincke and Lawson), 1887, A., 730; (Zincke), 1890, A., 990.
  - 2:4-*di*nitro- (Heim), 1888, A., 488; (Ernst), 1891, A., 300.
  - nitramido- (Heim), 1888, A., 488.
  - thio- (Kym), 1890, A., 1307.
- **Phenylnaphthylamine-blue** (Hausdörfer), 1890, A., 1308.
- **Phenyl-α-naphthylbiazolone** (Freund), 1892, A., 509.
- **Phenyl-β-naphthylcarbamide** [m.p. 220°] (Goldschmidt and Molinari), 1888, A., 1284.
- *as*-**Phenyl-β-naphthylcarbamide** [m.p. 189°] and chloride (Kym), 1890, A., 633.
- **Phenyl-α-naphthylcarbazole** (Kym), 1890, A., 1307.
- **Phenylnaphthylcarbazole**, boiling point of (Schweitzer), 1891, A., 1240.
- α-**Phenylnaphthylcarbinol** (Beckmann), 1889, A., 781.
- **Phenyl-*o*-naphthylenediamine** (Zincke and Lawson), 1887, A., 730; (Harden), 1890, A., 631.
  - action of benzaldehyde and of salicylaldehyde on (Fischer), 1892, A., 1472.
  - action of nitrous acid on (Zincke and Campbell), 1890, A., 788.
  - condensation of, with benzoin (Fischer), 1891, A., 748.
- **Phenylnaphthylene-ethyldiamine**
  - action of benzaldehyde on (Fischer), 1892, A., 1472.
- **Phenylnaphthylethylazammonium iodide** (Zincke and Campbell), 1890, A., 787.
- **Phenyl-α-naphthylethylthiocarbamide** (Mainzer), 1883, A., 1106.
- **Phenyl-α-naphthylformamidine** (Comstock and Wheeler), 1892, A., 706.
- **Phenyl-α-naphthylglycollic acid** (Beckmann), 1889, A., 781; (Beckmann and Paul), 1892, A., 170.

Phenyl-*α*- and -*β*-naphthylhydrazines, *o:p-di*nitro- (Willgerodt and Schulz), 1891, A., 572.

5-Phenyl-*α*- and -*β*-1-naphthyl-2-methylpyrroline-3-carboxylic acids (Lederer and Paal), 1886, A., 76.

Phenyl-*β*-naphthylmethylthiocarbamide (Gebhardt), 1884, A., 1321.

ald-**Phenyl-*az*-*β*-naphthylnaphthatriazine** (Meldola and Forster), 1891, T., 698.

Phenylnaphthylpinacoline (Elbs), 1887, A., 943.

Phenyl-*α*- and -*β*-naphthylsemithiocarbazides (Dixon), 1892, T., 1019; (Freund), 1892, A., 508.

Phenyl-*α*-naphthyl-*ψ*-thiobiazolone (Freund), 1892, A., 510.

Phenylnaphthylthiocarbamides (Mainzer), 1883, A., 1107; (Freund and Wolf), 1892, A., 984.

Phenylnitrethylene. See Styrene, nitro-.

Phenylnitrobenzenesulphazide, *m*- and *p*-nitro- (Limpricht), 1887, A., 723.

Phenyl-*m*-nitrobenzenylamidine (Lossen), 1892, A., 52.

Phenyl-*o*-, -*m*- and -*p*-nitrobenzenylnaphthylenediamines (Fischer), 1892, A., 1473.

Phenyl-*m*-nitrobenzimido-ether (Lossen), 1892, A., 52.

Phenyl-*m*-nitrobenzylamine (Borgmann), 1886, A., 57.

Phenyl*di*-*o*-nitrodibenzylhydrazine (Paal and Bodewig), 1892, A., 1456.

Phenylnitromethane. See Toluene, nitro-.

Phenyl*tetra*nitronaphthylamine (Merz and Weith), 1883, A., 344.

Phenyl-*p*- and -*o*-nitrophenyl oxides, *di*- and *tri*-nitro- (*tri- and tetranitrodiphenyl oxides*) (Willgerodt and Huetlin), 1884, A., 1328.

Phenyl-*o:p*-*di*nitrophenylcarbin cyanide, *p*-nitro- (*trinitrodiphenylacetonitrile*) (v. Richter), 1888, A., 1186.

Phenyl-*m*-nitrophenylmethylcarbamide (*m-nitro-s-diphenylmethylcarbamide*) (Lellmann and Benz), 1891, A., 1215.

az-**Phenyl-*ald*-*m*- and -*p*-nitrophenylnaphthatriazines** and *p*- and *m*-nitro- (Meldola and Forster), 1891, T., 693.

Phenylnitropropionic acid, *p*-nitro-, derivatives of (Friedländer and Mähly), 1885, A., 1137.

Phenyl*di*nitropropionic acid (Gabriel), 1885, A., 1229.

Phenylnitropropylene and its derivatives (Priebs), 1884, A., 313; 1885, A., 161.

Phenylnitrosoimidothiazoline (Schatzmann), 1891, A., 745; (Näf), 1891, A., 1517.

Phenylnitrososulphone (Rössing), 1890, A., 781.

Phenyl*di*nitrotoluidine (*γ-dinitrotolylphenylamine*) (Hepp), 1883, A., 317.

Phenyl-*m*-nitro-*p*-tolylcarbamide (Leuckart), 1890, A., 760.

Phenyl-*o*-nitro-*p*-tolylthiocarbamide, *m*-nitro- (Steudemann), 1884, A., 307.

Phenylnonyl-carbamide and **-thiocarbamide** (Freund and Schönfeld), 1892, A., 132, 133.

Phenyloctane. See Octylbenzene.

Phenyloctonitrile (*hexylbenzylic cyanide*) (Rossolymo), 1889, A., 862.

Phenylosazoneglyoxalcarboxylic acid (Nastvogel), 1889, A., 237.

n-**Phenylosotriazaldehyde** (Jonas and v. Pechmann), 1891, A., 1113.

n-**Phenylosotriazole** and its homologues (Jonas and v. Pechmann), 1891, A., 1113.
cyano- (Jonas and v. Pechmann), 1891, A., 1114.

n-**Phenylosotriazolecarboxylic acid** and its derivatives (Jonas and v. Pechmann), 1891, A., 1112.
amido-, and nitro- (Baltzer and v. Pechmann), 1891, A., 1116.

n-**Phenylosotriazoledicarboxylic acid** (Baltzer and v. Pechmann), 1891, A., 1116.

n-**Phenylosotriazolethiamide** (Jonas and v. Pechmann), 1891, A., 1114.

Phenylosotriazonecarboxylic acid (v. Pechmann), 1888, A., 1289.

n-**Phenylosotriazylamine** and *n*-**phenylosotriazyl alcohol** (Jonas and v. Pechmann), 1891, A., 1114.

Phenyloxamic acid. See Oxanilic acid.

μ-**Phenyloxazoline** (Gabriel and Heymann), 1890, A., 1267.
preparation of (Gabriel and Neumann), 1892, A., 1332.
m-nitro- (Elfeldt), 1892, A., 213.

Phenyl*iso*oxazole (Claisen and Stock), 1891, A., 451.

Phenyl*iso*oxazolone (Perkin and Stenhouse), 1891, T., 1005; (Claisen and Zedel), 1891, A., 468; (Hantzsch), 1891, A., 740; (Nussberger), 1892, A., 1177.

Phenyl*iso*oxazolone, oxime of (Claisen and Zedel), 1891, A., 468.

Phenyloximidoacetic acids, α- and β- (Müller), 1883, A., 1129; 1884, A., 584; (Hantzsch), 1890, A., 1274; 1891, A., 444.

Phenyloximidoacetonitrile (Russanoff), 1892, A., 322.

α-**Phenyloxyacrylic acid.** See Coumaric acid.

β-**Phenyloxyacrylic acid.** See Phenylglycidic acid.

Phenylparabanic acid (v. Stojentin), 1885, A., 1196.

Phenylparaconic acid and its salts (Jayne), 1883, A., 472; (Fittig and Röders), 1890, A., 621.
  constitution of (Erdmann), 1884, A., 906.
  nitration of (Erdmann), 1886, A., 67.
  bromo- and *iso*bromo- (Fittig and Leoni), 1890, A., 895.
  chloro- (*o*-, *m*- and *p*-), disubstituted naphthalenes from (Erdmann and Kirchhoff), 1889, A., 150.
  2:4-, 2:5- and 3:4-*di*chloro-, and their derivatives (Erdmann), 1889, A., 265; (Schwechten), 1890, A., 619; (Erdmann and Schwechten), 1891, A., 450.
  nitro- (Salomonson), 1885, A., 1224; 1888, A., 480.

Phenylparamide (*mellitic acid, phenylimide of*) (Hötte), 1885, A., 1220.

Phenylpentane. See Amylbenzene.

ω-**Phenylpentamethylene glycol** and **bromide** (Kipping and Perkin), 1890, T., 311, 313.

Phenylpentamethylpyrazolone (1-ψ-*cumyl*-2:3-*dimethylpyrazolone*) (Haller), 1885, A., 818.

Phenylpentenoic acid. See Hydrostyrylacrylic acid and Phenylmethyl-*iso*crotonic acid.

μ-**Phenylpentoxazoline** (Gabriel and Elfeldt), 1892, A., 212.
  m-nitro- (Elfeldt), 1892, A., 214.

Phenylpentylene. See Phenylamylene.

Phenyl*iso*pentylene. See *iso*Amylbenzene.

Phenylphenacyl oxide, *m*-nitro- (Lellmann and Donner), 1890, A., 523.

2′-**Phenylphen-*p*-azoxine** (Lellmann and Donner), 1890, A., 524.

Phenylphenotriazole, *meso*- (Kehrmann and Messinger), 1892, A., 889.

Phenyl-*o*-phenylenediamine (*amidodiphenylamine*) (Schöpff), 1890, A., 1113.

Phenyl-*p*-phenylenediamine (Ikuta), 1888, A., 167; (Hencke), 1890, A., 609.

Phenyl-*o*-phenyleneguanidine (Keller), 1891, A., 1469.

"**Phenyl-*p*-phenylglycoluric acid**" (Guareschi), 1892, A., 828.

Phenylphenylhydrazine, 3-bromo-6-nitro- (Willgerodt), 1888, A., 949.
  allo-*m*-chloro-*o*-nitro-, preparation of (Willgerodt and Ellon), 1891, A., 1361.

Phenyl-*ald*-phenylnaphthatriazine. See Diphenyl-αβ-naphthatriazine.

Phenylphenylsemithiocarbazides, *o*- and *p*-chloro- (Hewitt), 1891, T., 210, 212.

Phenylphosphoric acid. See Phenylic phosphate.

Phenylphosphorous acid (Noack), 1883, A., 736.

Phenylphosphoryl chloride (Noack), 1883, A., 735.

Phenylphosphoryl *di*-, *tetra*- and **thiochlorides** (Anschütz and Emery), 1890, A., 34, 35.

5-**Phenyl*iso*phthalic acid** (Doebner), 1890, A., 1284; 1891, A., 1065.

o-**Phenylphthalidecarboxylic acid,** isomeride of (Juillard), 1888, A., 955.

Phenylphthalimide, preparation of (Haller), 1892, A., 1204.

Phenylpiperazine, *p*-nitro- (Schmidt and Wichmann), 1892, A., 210.

1-**Phenyl-3:6-*o*-piperazone** (Michaelis and Hermens), 1892, A., 1494.

1-**Phenylpiperidine** and its derivatives (Lellmann), 1887, A., 604; (Lellmann and Geller), 1888, A., 1107.
  o-amido- (Lellmann and Just), 1891, A., 1245.
  p-amido-, formation of dyes from (Lellmann and Geller), 1888, A., 1108.
  p-bromo- (Lellmann and Just), 1891, A., 1244.
  nitro-derivatives of (Lellmann), 1887, A., 604.

γ-**Phenylpiperidine** (Bally), 1888, A., 65.

Phenylpiperidylcarbamide (Gebhardt), 1885, A., 384; (Wallach and Lehmann), 1887, A., 385.

Phenylpiperidyllactic acid (Erlenmeyer), 1889, A., 988.

Phenylpiperidylthiocarbamide (Skinner and Ruhemann), 1888, T., 558.

α-**Phenylpropaldehyde** (v. Miller and Rohde), 1891, A., 898.

β-**Phenylpropaldehyde** (*hydrocinnamaldehyde*) (v. Miller and Rohde), 1890, A., 979.

Phenylpropargyl oxide (Henry), 1883, A., 803.

Phenylpropenylamidine (Michael and Wing), 1885, A., 963.
Phenylpropiolic acid (Perkin and Bellenot), 1886, T., 441.
  preparation of (Perkin), 1884, T., 171.
  direct addition of hydrogen to (Aronstein and Holleman), 1889, A., 878.
  formation of *allo*cinnamic acid from (Liebermann and Scholz), 1892, A., 848.
  *di*chloride (Nissen), 1892, A., 1464.
  o-amido-, and its derivatives (v. Baeyer and Bloem), 1883, A., 196.
α-**Phenylpropionamide** (Janssen), 1889, A., 596.
β-**Phenylpropionamide** (v. Hofmann), 1886, A., 45; (Hughes), 1891, P., 71.
Phenylpropionic acid, formation of a hydrocarbon, $C_{18}H_{12}$, from (Kipping), 1892, P., 107.
α-**Phenylpropionic acid** (*hydratropic acid*) (Oliveri), 1890, A., 375.
  preparation of (Janssen), 1889, A., 596.
  derivatives of (Trinius), 1885, A., 529.
β-**Phenylpropionic acid** (*hydrocinnamic acid*) and its derivatives (Gabriel), 1883, A., 195; (Gabriel and Herzberg), 1883, A., 1123; (Herzberg), 1885, A., 661.
  thermochemistry of (Stohmann, Kleber and Langbein), 1889, A., 1096.
  melting point and separation of mixtures of phenylacetic acid and (Salkowski), 1885, A., 602.
  3:4-*di*amido- (Gabriel), 1883, A., 195.
  m-bromo- (Gabriel), 1883, A., 195.
  3:4-bromamido- (Gabriel), 1883, A., 195.
  o-, *m*- and *p*-chloro- (Herzberg), 1885, A., 661.
  p-chloro- (Miersch), 1892, A., 1222.
  αβ-*di*chloro- (Erlenmeyer), 1883, A., 196.
  chlorobromo- (Erlenmeyer), 1883, A., 196.
  o-, *m*- and *p*-iodo- (Herzberg), 1885, A., 661.
  3:5-*di*nitr-4-amido- (Stoehr), 1884, A., 1350.
α-**Phenylpropionic anhydride,** *o*-amido-. See Atroxindole.
β-**Phenylpropionic anhydride,** *o*-amido-. See Hydrocarbostyril.
β-**Phenylpropionic** (*cinnamic*) **chloride** (Hughes), 1891, P., 71.
α-**Phenylpropionitrile** (Meyer), 1889, A., 596.
Phenylpropionylcarbamide (Kühn), 1885, A., 260.
Phenylpropylacetamide, β- and γ-bromo- (Elfeldt), 1892, A., 214.
Phenylpropylacetic acid (Rossolymo), 1889, A., 861.
Phenyl*iso*propylacetylglycollic acid. See Acetylcumylglycollic acid.
Phenylpropylamine and its derivatives (Tafel), 1886, A., 940; 1889, A., 976; (Garelli), 1892, A., 845.
  di- and *tri*-nitro- (van Romburgh), 1886, A., 455.
Phenyl*iso*propylamine (Edeleanu), 1887, A., 583.
Phenyl*iso*propylbenzenylnaphthylenediamine (Fischer), 1892, A., 1473.
Phenylpropylcarbinol (Marshall and Perkin), 1891, T., 886.
Phenylpropylene. See Allylbenzene.
1-Phenyl-4-*iso*propylene-3:5-pyrazolidone (Michaelis and Burmeister), 1892, A., 1005.
Phenylpropylene-ψ-semithiocarbazide (Avenarius), 1891, A., 550.
Phenylpropylene-ψ-thiocarbamide (Prager), 1890, A., 159.
Phenyl*iso*propylethylene glycol (Fossek), 1884, A., 833.
Phenyl*iso*propylhydrazine (Philips), 1887, A., 1104.
Phenylpropylic alcohol (Errera), 1887, A., 35.
Phenyl*iso*propylic alcohol (*benzylmethylcarbinol*) (Errera), 1887, A., 35.
Phenyl*iso*propylketone-*o*-carboxylic acid (*benzoylisopropyl-o-carboxylic acid*) (Roser), 1885, A., 268.
Phenylpropylnitramine, *tri*nitro- (van Romburgh), 1886, A., 455.
Phenylpropylthiocarbamine chloride (Billeter and Strohl), 1888, A., 364.
Phenyl-propyl- and -*iso*propyl-triazole-carboxylic acids (Bladin), 1892, A., 638.
Phenylpropyl-. See also Propylphenyl-.
Phenyl*meta*pyrazole (Pinner and Lifschütz), 1887, A., 1055.
1-Phenylpyrazole (Balbiano), 1887, A., 1054; 1889, A., 1215; (Knorr and Laubmann), 1889, A., 410.
  derivatives of (Balbiano), 1890, A., 1164.
  4-bromo- and *di*- and *tri*-bromo- (Balbiano), 1890, A., 797.
2-Phenyl-β-pyrazole. See 2-Phenylglyoxaline.

1-Phenylpyrazole-4-carboxylic acid (Knorr and Laubmann), 1889, A., 410.
1-Phenylpyrazole-5-carboxylic acid (Claisen and Roosen), 1891, A., 1107.
1-Phenylpyrazole-3:5-dicarboxylic acid (Balbiano), 1890, A., 1164; (Claisen and Roosen), 1891, A., 1107.
  4-bromo- (Balbiano), 1890, A., 1165.
1-Phenylpyrazole-3:4:5-tricarboxylic acid (Knorr and Laubmann), 1889, A., 410.
1-Phenylpyrazolidine (Michaelis and Lampe), 1892, A., 355.
1-Phenyl-3:5-pyrazolidone (Michaelis and Burmeister), 1892, A., 1004.
  4-oxime of (Michaelis and Burmeister), 1892, A., 1005.
1-Phenyl-3:5-pyrazolidone-4-azobenzene (Michaelis and Burmeister), 1892, A., 1005.
1-Phenylpyrazoline (Fischer and Knoevenagel), 1887, A., 932; (Balbiano), 1889, A., 1215.
Phenyl*meta*pyrazolone (*α-phenylhydantoin*) (Pinner), 1888, A., 1102.
Phenylpyrazolone (*quinizine*) derivatives, constitution of (Knorr), 1884, A., 1377; 1887, A., 601.
1-Phenylpyrazolone (Ruhemann and Morrell), 1892, T., 799.
1-Phenyl*iso*pyrazolone and 4-bromo- (Fischer and Knoevenagel), 1887, A., 933.
1-Phenylpyrazolone-3-carboxylic acid (Buchner), 1890, A., 156.
1-Phenylpyrazolone-4-carboxylic acid (Ruhemann and Morrell), 1892, T., 797, 799.
1-Phenylpyrazolone-3-carboxylic acid, 4-amido- (Tafel), 1887, A., 468.
2-Phenylpyridine (Skraup and Cobenzl), 1883, A., 1015.
3-Phenylpyridine, and its diketone (Skraup and Cobenzl), 1883, A., 1013.
4-Phenylpyridine, and its salts (Hantzsch), 1884, A., 1194.
2-Phenylpyridine ketone, and its salts (Skraup and Cobenzl), 1883, A., 1015.
3-Phenylpyridinecarboxylic acid and its salts (Skraup and Cobenzl), 1883, A., 1012.
Phenylpyridinedicarboxylic acids, 2- and 3-, and their salts (Skraup and Cobenzl), 1883, A., 1014, 1011.
2-Phenylpyridinedicarboxylic acid, *di*bromo-, and its salts (Skraup and Cobenzl), 1883, A., 1014.
2-Phenylpyridinephenyleneketonecarboxylic acid (Doebner and Kuntze), 1889, A., 412.
3-Phenylpyridinesulphodicarboxylic acid (Immerheiser), 1889, A., 527.
4-Phenylpyridinetetracarboxylic acid, and its salts (Hantzsch), 1884, A., 1193.
1-Phenyl-4-pyridone, *αββ-tri*chloro- (Zincke), 1890, A., 965; (Zincke and Fuchs), 1892, A., 448.
1-Phenyl-4-pyridonecarboxylic acid, *αββ-tri*chloro- (Zincke), 1890, A., 965; (Zincke and Fuchs), 1892, A., 448.
Phenylpyrrodiazolecarboxylic acid, 1:3-, synthesis of (Andreocci), 1892, A., 636.
1-Phenylpyrrolineazobenzene (Fischer and Hepp), 1886, A., 1042.
1-Phenylpyrroline-2:5-dibenzoic acid (Baumann), 1887, A., 735.
Phenylpyruvic acid (Plöchl), 1884, A., 604; 1887, A., 254; (Erlenmeyer), 1887, A., 142, 1046; (Wislicenus), 1887, A., 587.
  synthesis of (Erlenmeyer), 1889, A., 990.
Phenylquinaldine. See Phenyl-2′-methylquinoline.
Phenylquinaldinic acid, See 4′-Phenylquinoline-2′-carboxylic acid.
2′-Phenylquinazoline (Gabriel and Jansen), 1890, A., 1442.
α-Phenylquininic acid (Doebner), 1889, A., 411.
Phenylquinoline, amido- [m.p. 136°·5] (Jellinek), 1886, A., 1045.
1-Phenylquinoline and its derivatives (La Coste and Sorger), 1886, A., 80.
3-Phenylquinoline and its derivatives (La Coste and Sorger), 1886, A., 81.
  amido-(Weidel and v. Georgievics), 1888, A., 967.
2′-Phenylquinoline, preparation of (Friedländer and Göhring), 1883, A., 1148; (Doebner and v. Miller), 1883, A., 1149.
  derivatives of (Doebner and v. Miller), 1886, A., 721; (Murmann), 1892, A., 1003.
  2-amido- (v. Miller and Kinkelin), 1885, A., 1144.
3′-Phenylquinoline, preparation of (Friedländer and Göhring), 1883, A., 1148.
4′-Phenylquinoline and its derivatives (Grimaux), 1883, A., 668; (Koenigs and Nef), 1886, A., 1045; 1887, A., 599.

3′-Phenyl*iso*quinoline and 4′-amido-, and 1′:4′:-chloronitro- (Gabriel), 1886, A., 265, 630.

Phenylquinolineamine, and its salts (Friedländer and Weinberg), 1885, A., 990.

2′-Phenylquinoline-4′-carboxylic acid (*α-phenylcinchonic acid*) (Doebner), 1887, A., 504.
  homologues of (Doebner and Gieseke), 1888, A., 300.

4′-Phenylquinoline-2′-carboxylic acid (*phenylquinaldinic acid*) (Koenigs and Nef), 1886, A., 1045.

3-Phenylquinoline-*mono*- and -*di*-carboxylic acids (Claus and Nicolaysen), 1886, A., 68.

2′-Phenylquinolinesulphonic acids (Murmann), 1892, A., 1003.

3-Phenylquinoline-*p*- and -*β*-sulphonic acids and their salts (La Coste and Sorger), 1886, A., 82.

Phenylquinonediimide (Hencke), 1890, A., 609.

Phenylrosaniline, *di*nitro- (Nölting), 1883, A., 54.

Phenylrosinduline (*rosinduline*) (Fischer and Hepp), 1888, A., 1291; 1890, A., 909.
  amido- (Fischer and Hepp), 1890, A., 765.

Phenylrosindulinesulphonic acid (Fischer and Hepp), 1891, A., 1045.

Phenylsalicenyluramidoxime (Spilker), 1890, A., 144.

Phenylsalicylic acid (Graebe), 1888, A., 477; (Arbenz), 1890, A., 892.
  *tri*bromo-, and *di*nitro- (Arbenz), 1890, A., 893.

Phenylsantoninmethane, *m*-nitro- (Bertoni), 1892, A., 622.

α-Phenylselenazylamine (Hoffmann), 1889, A., 726.

Phenylseleniocarbamide (Stolte), 1886, A., 781.

Phenylseleniocarbimide (Stolte), 1887, A., 43.

Phenylsemicarbazide (Edeleanu), 1892, A., 1323.
  o-chloro- (Hewitt), 1891, T., 210.

Phenylsemithiocarbazide (Skinner and Ruhemann), 1888, A., 274.

Phenylsorbinosazone (Fischer), 1887, A., 567.

Phenylsuccenylamidine (Comstock and Wheeler), 1892, A., 702.

Phenylsuccinamic acid, *p*-bromo- (Hoogewerff and van Dorp), 1891, A., 196.

Phenylsuccinamide, constitution of (Hoogewerff and van Dorp), 1891, A., 197.
  action of potassium hypobromite on (Hoogewerff and van Dorp), 1891, A., 196.
  p-bromo-, and bromamido- (Hoogewerff and van Dorp), 1891, A. 196.

Phenylsuccinazone (Ciamician and Zanetti), 1890, A., 1120.

Phenylsuccinimide (Moine), 1887, A., 489.
  preparation of (Haller), 1892, A., 1204.

Phenylsulpharsenic acid, disodium salt of (Schulte), 1883, A., 187.

Phenylsulphineacetic acid, non-existence of (Otto and Engelhardt), 1887, A., 263.

"**Phenylsulphocyamine,**" α-amido- (Ville), 1887, A., 833.

Phenylsulphonamic acid (Traube), 1890, A., 1137.
  *di*bromo-, barium salt of (Traube), 1891, A., 569.

Phenylsulphone. See Diphenylsulphone.

Phenylsulphoneacetates, properties of (Michael and Palmer), 1885, A., 986.

Phenylsulphoneacetonamine (R. and W. Otto), 1888, A., 282.

Phenylsulphoneacetone (Otto), 1886, A., 801; (Otto and Rössing), 1890, A., 780.

Phenylsulphoneacetonephenylmercaptole (R. and W. Otto), 1888, A., 282; (Otto and Rössing), 1891, A., 568.

Phenylsulphoneacetoxime (R. and W. Otto), 1888, A., 282.

Phenylsulphone-*o*-amido- and -*o*-nitroanilides and -*m*-amido- and -*m*-nitro-*p*-toluidides (Lellmann), 1884, A., 51.

Phenylsulphone-δ-amidovaleric acid (Schotten and Schlömann), 1892, A., 354.

Phenylsulphone-*mono*-and -*di*-bromacetones (R. and W. Otto), 1888, A., 282.

Phenylsulphone*di*bromamide (Hoogewerff and van Dorp), 1888, A., 1194.

α-Phenylsulphone-α-bromopropionic acid (Otto), 1890, A., 381.

α-Phenylsulphonebutyric acid (R. and W. Otto), 1888, A., 577.

β-Phenylsulphone-crotonic and -*iso*crotonic acids (Autenrieth), 1891, A., 203.

Phenylsulphone-ethylic alcohol, and its derivatives (Otto and Damköhler), 1885, A., 262.

Phenylsulphone-ethylic sulphate and chloride (Otto and Damköhler), 1885, A., 262, 263.

Phenylsulphonehydroxypropionic acid, *p*-chloro- (König), 1892, A., 1091.

Phenylsulphonephenylbenzenylamidine (Wallach), 1883, A., 48.

Phenylsulphonephenylhydrazine (Escales), 1885, A., 798.

α-**Phenylsulphonepropionic acid** (Otto), 1890, A., 381.
  preparation of the ethylic salts of (Otto), 1885, A., 537.

β-**Phenylsulphonepropionic acid** (Otto), 1888, A., 360.

Phenylsulphonepropionic acid, *p*-chloro-*α*-amido- (König), 1892, A., 1091.

Phenylsulphonetetrahydroquinoline (Schotten and Schlömann), 1892, A., 355.

Phenyltaurine and its salts (Andreasch), 1883, A., 664.
  preparation of (James), 1885, T., 369.
  anilide, and its hydrochloride (Leymann), 1885, A., 786.

Phenyltaurocyamine, formation of (James), 1885, T., 373.

Phenyltetrahydro-*α*- and -*β*-naphthabenzyl-carbamides and -thiocarbamides (Bamberger and Helwig), 1889, A., 1198.

2′-**Phenyltetrahydro-*α*-naphthaquinoline** (Doebner and Kuntze), 1889, A., 412.

Phenyl-*α*-tetrahydronaphthyl-carbamide and -thiocarbamide (Bamberger and Althausse), 1888, A., 960.

1-**Phenyl-Δ^2-tetrahydropicoline** (Lipp), 1892, A., 1244.

3′-**Phenyltetrahydroquinazoline** (Paal and Busch), 1890, A., 73.
  2′-thio- (Söderbaum and Widman), 1889, A., 973; (Busch), 1892, A., 1495.

2′-**Phenyltetrahydroquinoline** and its nitroso-derivative (Doebner and v. Miller), 1886, A., 722.
  m-amido- and *m*-nitro- (v. Miller and Kinkelin), 1885, A., 1145.

Phenyltetra-*m*-hydroxydiphenylmethane, *p*-nitro- (Siboni), 1892, A., 621.

Phenyltetra-*p*-hydroxydiphenylmethane, *o*-nitro- (Siboni), 1892, A., 621.

Phenyltetra-*p*-hydroxydiphenylmethanes, *m*- and *p*-nitro- (Bertoni and Zenoni), 1892, A., 620.

Phenyltetramethylenic *di*bromide and glycol (Marshall and Perkin), 1891, T., 890.

Phenyltetramethylpyrazolone (1-*ψ*-*cumylmethyloxyquinizine*) and its oxime (Haller), 1885, A., 818.

Phenyltetrazenylamidoxime (Bladin), 1889, A., 979.

Phenyltetrazolecarboxylic acid, amido- and nitro- (Bladin), 1892, A., 1009.

Phenyltetrazolecarboxylthiamide (Bladin), 1892, A., 638.

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μ-**Phenylthiazole** (Hubacher), 1891, A., 221.

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α-**Phenyl*di*thiobiuret** (Hecht), 1892, A., 704; (Fromm), 1892, A., 844.

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- **Phenylthiocarbimide-aldehyde-ammonia,** and action of silver nitrate on (Dixon), 1892, T., 518, 521.
- *α*-**Phenyl***di***thiodimethylketuret** (Fromm), 1892, A., 844.
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- **Phenylthiophen** and its derivatives (Renard), 1890, A., 134.
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- **Phenylthiourethane** (Schiff and Vanni), 1892, A., 600.
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- **Phenyl-***p***-toluidine** and its derivatives (Buch), 1885, A., 147; (Bonna), 1887, A., 927; (Reichold), 1890, A., 609.
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  - *p*-amido- (Reichold), 1890, A., 610.
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- *p*-**Phenyltolylacetonitrile** (Neure), 1889, A., 597; (Michael and Jeanprêtre), 1892, A., 1094.
- **Phenyltolylbenzylacetonitrile** (Neure), 1889, A., 597.
- **Phenyl-***p***-tolylbenzylbiuret** (Kühn and Henschel), 1888, A., 474.
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- **Phenyl-***o***-tolyldiketopyrazine,** *di*chloro- (Abenius), 1890, A., 526.
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p-**Propenylbenzoic acid** and its salts (Widman), 1883, A., 330.
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p-**Propenylsalicylic acid** (*hydroxypropenylbenzoic acid*) (Heymann and Koenigs), 1887, A., 241.
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"**Propimine thiocyanate,**" and its derivatives (Tcherniac and Norton), 1884, A., 664.
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- **Propionic acid,** electrolysis of (Bunge), 1890, A., 1236.
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  - the halogen-derivatives of, action of heat and water on (Beckurts and Otto), 1885, A., 506.
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  - α-bromo- (Volhard), 1888, A., 129.
    - electrolysis of (Cohn), 1889, A., 1056.
  - β-bromo- (Lederer), 1891, A., 37.
  - αβ-*di*bromo-, action of, on ethylic malonate (Conrad and Guthzeit), 1884, A., 991.
  - *tri*bromo- (Niemilowicz), 1890, A., 861.
  - *tetra*bromo-, and its salts (Mabery and Robinson), 1884, A., 664.
  - ββ-*di*chloro-, and its derivatives (Fromme and Otto), 1887, A., 912.
  - *tetra*chloro- (Mabery and Smith), 1890, A., 27.
  - chloro*tri*bromo-, decomposition of, by alkaline hydroxides (Mabery), 1884, A., 663.
  - *di*chlorobromo- (Mabery and Smith), 1890, A., 27.
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  - *tri*chlorobromo- (Mabery), 1887, A., 570.
  - *tetra*chloro-β-bromo- (Mabery), 1885, A., 508.
  - β-iodo-, preparation of (Meyer), 1887, A., 232; 1888, A., 360.
    - action of, on ethylic thiocarbamate (Langlet), 1892, A., 440.
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  - β-sulpho- (Ciamician and Magnaghi), 1886, A., 226; (Rosenthal), 1886, A., 866.
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- **Propionic anhydride,** α-*di*chloro- (Otto and Holst), 1890, A., 1327.
- **Propionitrile** (*ethylic cyanide*), magnetic rotatory power of (Perkin), 1889, T., 701.
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    - α-*di*chloro- (Otto and Voigt), 1887, A., 1024.
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- **Propiono-diphenyl-** and **-di-*o*-** and **-*p*-tolyl-hydrazides** (Gattermann, Johnson and Hölzle), 1892, A., 843.
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- **Propionophenylcarbizin** (Freund and Goldsmith), 1888, A., 1187.
- **Propionophenylhydrazide** (Freund and Goldsmith), 1888, A., 1187; (Otto and Holst), 1890, A., 1328.
- **Propiono-*o*-toluidide** (Pictet and Duparc), 1888, A., 370.
- **Propiono-*o*-** and **-*p*-tolylhydrazides** (Gattermann, Johnson and Hölzle), 1892, A., 843.

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α-**Propionylacrylic acid** (Hantzsch and Wohlbrück), 1887, A., 717.
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α-**Propionylethylic cyanide.** See Methylpropionylacetonitrile.
1:3:4-**Propionylhomoferulic acid** (Tiemann and Kraaz), 1883, A., 200.
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α-**Propionylpropionamide** (Otto and Tröger), 1889, A., 957.
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1-**Propionylpyrroline** (Dennstedt and Zimmermann), 1887, A., 844.
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  amido-, hydrochloride (Schmidt), 1890, A., 372.
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  γ-bromo- (Lohmann), 1891, A., 1467.
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p-**Propoxybenzoic acid** (Remsen and Graham), 1889, A., 975.
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Propoxybromosalicylic acid (Peratoner), 1887, A., 487.
4-**Propoxy-β-naphthaquinone**, 3-chloro- (Zincke), 1888, A., 710.
Propoxypropylanthracene (Hallgarten), 1889, A., 895.
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  compounds, specific volumes of (Zander), 1883, A., 13.
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*iso***Propylacetone**, oxime of (Westenberger), 1884, A., 581.
*iso***Propylacetonylphosphinic acid**, and its salts (Michaelis), 1884, A., 901; 1885, A., 747.

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*iso***Propylacetylene.** See Pentinene.
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*iso***Propylamine,** αβ-*di*thiocyano-, and its derivatives (Tcherniac and Norton), 1884, A., 664.
*iso***Propylamines** (H. and A. Malbot), 1891, A., 166.
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Propylammonium propyl*di***thiocarbamate** (Hecht), 1890, A., 476.
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*p-iso***Propyl-***o-iso***amyltoluene** (Claus), 1892, A., 985.
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  p-nitroso- (Wacker), 1888, A., 466.
*iso***Propylaniline** (Pictet and Crépieux), 1888, A., 689; (Pictet), 1890, A., 758.
Propylanilinenitrosamine, *p*-nitroso- (Wacker), 1888, A., 466.
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  β-bromo- (Hirsch), 1890, A., 860.
  γ-bromo- (Gabriel and Elfeldt), 1892, A., 212.
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  γ-chloro- (Gabriel and Elfeldt), 1892, A., 213.
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*iso***Propylbenzene.** See Cumene.
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*iso***Propylbenzoic acid.** See *iso*Cuminic acid.
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p-**Propylbenzophenone** and its oximes (Smith), 1892, A., 488.
*p-iso***Propylbenzophenone** and its oximes (Smith), 1892, A., 489.
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*iso***Propylbenzoylformic acid** (*isopropylphenylglyoxylic acid*) (Fileti and Amoretti), 1891, A., 1060.
Propylbenzylamine (Zaunschirm), 1888, A., 1077.
*iso***Propylbenzylamine.** See Cuminylamine.
Propyl*iso***butanetricarboxylic acid** (Bischoff and Tigerstedt), 1890, A., 1103.
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  *di*bromo- (Paal), 1889, A., 117.
*iso***Propyl***iso***butylethylene glycol** (Fossek), 1884, A., 833; (Swoboda and Fossek), 1891, A., 31.
Propyl-*n*- and *-iso-***butylglyoxalines** (*oxal-n-* and *-iso-butylbutylines*) (Rieger), 1889, A., 119.
Propyl*iso***butylglyoxaline** (*oxalpropylisoamyline*) (Radziszewski), 1884, A., 986.
α-*iso***Propyl-**β-*iso***butylhydracrylic acid** (Wohlbrück), 1887, A., 1100.

Propyl*iso*butylquinol (Fiala), 1886, A., 454.
3′-Propyl-2′-butylquinoline, and its salts (Doebner and v. Miller), 1884, A., 1376.
3′-*iso*Propyl-2′-*iso*butylquinoline (Spady), 1886, A., 263.
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***p*-*iso*Propyl-*n*-** and **-*iso*-*o*-butyltoluenes** (Claus), 1892, A., 985.
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  2:3-*di*bromo-, and its derivatives (Andreasch), 1884, A., 732; (Paal and Heupel), 1892, A., 30; (Paal), 1892, A., 578.
α-Propyl-β-chlorocinnamic acid (Perkin and Calman), 1886, T., 163.
α-*iso*Propylcinchonic acid (Doebner), 1887, A., 504.
***iso*Propylcinnamaldehyde.** See α-Cumylacraldehyde.
***iso*Propylcinnamic acid.** See Cumylacrylic acid.
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α-*iso*Propylcoumarin, derivatives of (Aldringen), 1892, A., 330.
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α-*iso*Propyl-coumaroxime and **-coumarphenylhydrazide** (Aldringen), 1890, A., 624.
***iso*Propyl-*m*-cresol** and its derivatives (Mazzara), 1883, A., 463.
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3′-*iso*Propyldihydroindole (Trenkler), 1889, A., 260.
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  α-chloro- and *iso*-α-chloro- (Wislicenus), 1887, A., 656; (Wislicenus, Teisler and Langbein), 1889, A., 236.
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Propylene ethylphenylketate, preparation and oxidation of (Morley and Green), 1885, T., 135.
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1:2-Propylene glycol (*trimethyl glycol*), formation of, from acetylcarbinol (Perkin), 1891, T., 796.
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1:3-Propylene glycol (*trimethylene glycol*) (Niederist), 1883, A., 450.
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4-*iso*Propylenebis-1- and **-3-phenylmethylpyrazolone** (Knorr), 1887, A., 602.
Propylenecarbamide (Gabriel), 1890, A., 128.
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Propylene-ψ-carbamide (Hirsch), 1890, A., 859.

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Propylenedi*iso*amylamine acetate and **benzoate** (Louïse), 1889, A., 118.

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Propylenediphenyldisulphone (Stuffer), 1890, A., 988; 1891, A., 181.

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Propylene-ethenyldiamine (*ethenylpropylenediamine*) (v. Hofmann), 1888, A., 1051.

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Propylene-oxamic acid and **-oxamide** (Strache), 1888, A., 1173.

Propyleneoxycarboxylic acid. See *β*-Methylglycidic acid.

Propylene-ψ-selenocarbamide hydrobromide (Fittig and Dubois), 1890, A., 880.

Propylenesuccinimide (Strache), 1888, A., 1173.

Propylenethiocarbamide methiodide (Gabriel), 1890, A., 128.

Propylene-ψ-thiocarbamide (Gabriel), 1890, A., 127; (Hirsch), 1890, A., 859.

Propylenic bromide, conversion of trimethylenic bromide into (Gustavson), 1888, A., 240.
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 *di*nitrite (Bertoni), 1887, A., 458.
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***iso*Propylethylene.** See *α*-*iso*Amylene.

Propylethylic cyanide, oxime of. See Methylethyl*iso*oxazole, amido-.
 α-imido- (*imidohexonitrile*) (v. Meyer), 1889, A., 114.

***iso*Propylformamide** (Spica), 1887, A., 1028.

Propylformanilide (Pictet and Crépieux), 1888, A., 689; (Pictet), 1890, A., 758.

Propyl*iso*formanilide (Comstock and Clapp), 1892, A., 708.

***iso*Propylformanilide** (Pictet and Crépieux), 1888, A., 689; (Pictet), 1890, A., 758.

Propylformimide hydrochloride (Pinner), 1883, A., 1089.

***iso*Propylformonaphthylamide** (Spica), 1887, A., 1028.

Propylglyoxaline (*glyoxalbutyline*) (Rieger), 1889, A., 119.

p-**Propylglyoxaline** (Wallach), 1883, A., 911.

***iso*Propylglyoxaline** (*glyoxalisobutyline*) (Radziszewski), 1883, A., 1086; (Rieger), 1889, A., 120.

Propyl-group in cymene, nature of the (Widman), 1891, A., 686.
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Propylhexamethylene (Bamberger and Lengfeld), 1890, A., 1320.

Propylhexylglyoxaline (*oxalpropylœnanthyline*) (Karcy), 1887, A., 911.

α-**Propylhomopiperidinic acid** (Aschan), 1891, A., 467.

Propylhydrocarbostyril (Widman), 1887, A., 132.

p-**Propylhydrocinnamic acid** (*propylphenylpropionic acid*) (Widman), 1887, A., 133.

Propylic alcohol, vapour pressures of (Richardson), 1886, T., 763, 771, 773; (Schmidt), 1892, A., 397.
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***iso*Propylic alcohol,** action of bromine on (Etard), 1892, A., 809.
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*iso***Propylidene-*p*-amidophenol** (Haegele), 1892, A., 1451.
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*iso***Propylidenediphenol** (Dianin), 1889, A., 1187.
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*iso***Propyl*iso*phthalic acid** (Doebner), 1890, A., 1283; 1891, A., 1064.
*iso***Propylphthalide** (Roser), 1885, A., 268.
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*iso***Propylpyridines** (Ladenburg and Schrader), 1884, A., 1048.
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*iso***Propylthienyl ethyl ketone** (*β-isopropylpropiothienone*) (Thiele), 1892, A., 443.
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*iso***Propylxylenesulphanilide** (UHLHORN), 1890, A., 1249.

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Tetrabenzoyl-erythritol and **-levulose** (Skraup), 1889, A., 1152.

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Tetracetyl-α-*di*amidophenanthraquinol (Kleemann and Wense), 1885, A., 1240.

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Tetracetylmucic acid (Maquenne), 1888, A., 676.

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Tetradecane (*diheptyl*) (Sorabji), 1885, T., 40; (Krafft), 1886, A., 998.

- **Tetradecenoic acid** (*hexylpentylacrylic acid;* $C_{14}H_{26}O_2$) (Perkin), 1883, T., 48, 62, 66.
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- **Tetradecylacetylene** (Krafft and Reuter), 1892, A., 1163.
- **Tetradecylene,** preparation of (Krafft), 1884, A., 571.
- **Tetradecylenic bromide** (Krafft), 1884, A., 1108.
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- **Tetradecyl-malonamic** and **-malonic acids** (Hell and Iordanoff), 1891, A., 821.
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- **Tetrahydrazoresorufin** (Brunner and Kraemer), 1884, A., 1334.
- **Tetrahydroacenaphthene** (Bamberger and Lodter), 1888, A., 292; (Liebermann and Spiegel), 1889, A., 720.
- **Tetrahydro-γ-anthracenecarboxylic acid** (Börnstein), 1884, A., 330.
- **Tetrahydrobenzoic acid** and its derivatives (Aschan), 1891, A., 1053.
- **Tetrahydrobenzoic acids,** Δ^1- and Δ^2- and their derivatives (Aschan), 1891, A., 1481.
- **Tetrahydrocarbazolecarboxylic acid** (v. Baeyer and Tutein), 1889, A., 1181.
- **Tetrahydrocinchonic acid,** hydrochloride of (Weidel and Hazura), 1885, A., 561.
- **Tetrahydrodibenzylidene-2:6-lutidine** (Schuster), 1892, A., 1361.
- **Tetrahydrodicollidine,** and its derivatives (Hantzsch), 1883, A., 84.
- **Tetrahydrodicoumaric acid** and its salts (Dyson), 1887, T., 68.
- **Tetrahydrodicoumarin** (Dyson), 1887 T., 70.
- **Tetrahydrodiphenyl** (Bamberger and Lodter), 1888, A., 293.
- **Tetrahydrodiphenylic** *di***bromide** and its bromo-derivative (Bamberger and Lodter), 1888, A., 604.
- **Tetrahydrodiquinoline** (Friedländer and Weinberg), 1885, A., 990.
- **Tetrahydroharmine** (Fischer), 1889, A., 730.
- **Tetrahydro-α-naphthabenzylamine** (Bamberger and Lodter), 1887, A., 719.
- **Tetrahydro-β-naphthabenzylamine** (Bamberger and Boekmann), 1887, A., 840.
- **Tetrahydronaphthalene** (Graebe and Guye), 1884, A., 608.
  - derivatives (Perkin), 1887, P., 92; 1888, T., 1; (Kipping), 1887, P., 93.
- **Tetrahydro-α-naphthalene** (Bamberger and Bordt), 1889, A., 717; (Bamberger and Kitschelt), 1890, A., 1146.
- **Tetrahydro-α-naphthalene,** *ar*-amidoazo- (Bamberger and Lengfeld), 1890, A., 1305.
- **Tetrahydronaphthaleneazo-α-naphthylamine,** and **-resorcinol** (Bamberger and Bordt), 1889, A., 715.
- **Tetrahydronaphthaleneazo-β-naphthylamine,** 1:4′-amido- (Bamberger and Bammann), 1889, A., 783.
- **ββ-Tetrahydronaphthalenedicarboxylic acid** (Perkin), 1888, T., 11, 20.
  - synthesis of (v. Baeyer and Perkin), 1884, A., 907.
- **ββ-Tetrahydronaphthalenedicarboxylic anhydride** (Perkin), 1888, T. 12.
- **Tetrahydronaphthalenesulphonic acid,** hydrolysis of (Friedel and Crafts), 1889, A., 1201.
- **Tetrahydronaphthalenesulphonic acids** (Graebe and Guye), 1884, A., 608.
- **Tetrahydronaphthalenetetracarboxylic acid** (Perkin; Kipping), 1887, P., 93.
- *ar*-**Tetrahydro-α-naphthamide** (Bamberger and Bordt), 1889, A., 716.
- *ar*-**Tetrahydro-α-naphthaquinol** (Bamberger and Lengfeld), 1890, A., 1305.
- **Tetrahydro-α-naphthaquinoline** and its *p*-amido-derivative (Bamberger and Stettenheimer), 1891, A., 1258.

Tetrahydro-β-naphthaquinoline (Bamberger and Müller), 1891, A., 1510.

ar-**Tetrahydro-α-naphthaquinone** (Bamberger and Lengfeld), 1890, A., 1305.

Tetrahydro-naphthathionine and -**naphthindamine** (Bamberger), 1890, A., 1300.

Tetrahydro-α-naphthoic acid (Bamberger and Bordt), 1889, A., 716; (v. Baeyer, Schoder and Besemfelder), 1892, A., 192.

ac-**Tetrahydro-α-naphthoic acids** (v. Sowinski), 1891, A., 1380.

Tetrahydro-β-naphthoic acid (v. Sowinski), 1891, A., 1381; (v. Baeyer, Schoder and Besemfelder), 1892, A., 194.

ar-**Tetrahydro-α-naphthol** (Bamberger and Althausse), 1888, A., 960; (Bamberger and Bordt), 1890, A., 508.
  amido- (Bamberger and Bammann), 1889, A., 783.

ac-**Tetrahydro-β-naphthol** (Bamberger and Lodter), 1890, A., 506.

ar-**Tetrahydro-β-naphthol** (Bamberger and Kitschelt), 1890, A., 627, 633.

Tetrahydro-α-naphthonitrile and -**α-naphthothiamide** (Bamberger and Bordt), 1889, A., 716.

Tetrahydro-α-naphthylamine (Bamberger), 1888, A., 159; (Bamberger and Althausse), 1888, A., 959; (Bamberger and Bordt), 1889, A., 715; (Bamberger and Bammann), 1889, A., 782, 784.

Tetrahydro-β-naphthylamine and its derivatives (Bamberger), 1888, A., 159; (Bamberger and Müller), 1888, A., 599, 712.
  ac- and *ar*- (Bamberger and Kitschelt), 1890, A., 631.

Tetrahydronaphthylamine compounds, relations between the physiological properties and constitution of (Bamberger and Filehne), 1889, A., 737.

Tetrahydro-β-naphthylaminephenylcarbamide (Bamberger and Müller), 1888, A., 600.

Tetrahydronaphthylanisoil (Koenigs and Mai), 1892, A., 1445.

ac-**Tetrahydro-β-naphthylbenzylideneamine** (Bamberger and Kitschelt), 1890, A., 632.

Tetrahydro-β-naphthylcarbinylamine tetrahydro-β-naphthylcarbinyl*di*thiocarbamate (Bamberger and Helwig), 1889, A., 1198.

β-**Tetrahydronaphthyldiethylamines**, isomeric (Bamberger and Williamson), 1889, A., 1000.

Tetrahydronaphthylene chlorhydrin and oxide (Bamberger and Lodter), 1891, A., 1072.

ar-**Tetrahydro-1:4-naphthylene*di*chloro*di*imide** (Bamberger), 1890, A., 1300.

Tetrahydro-1:2-naphthylenediamines, *ac*- and *ar*- (Bamberger and Schieffelin), 1889, A., 893.

ar-**Tetrahydro-1:4-naphthylenediamine** (Bamberger and Schieffelin), 1889, A., 893.

ac-**Tetrahydro-1:4′-naphthylenediamine** (Bamberger and Abrahall; Bamberger and Bammann), 1889, A., 782.
  decomposition of, into its optically active components (Bamberger), 1890, A., 511.
  tetrahydroamidonaphthylthiocarbamate (Bamberger and Bammann), 1889, A., 783.

α-**Tetrahydronaphthylethylamine** (Bamberger and Helwig), 1889, A., 891.
  hydrochloride, *p*-nitroso- (Bamberger and Helwig), 1889, A., 892.

β-**Tetrahydronaphthylethylamines**, *ac*- and *ar*- (Bamberger and Müller), 1889, A., 888, 890.

Tetrahydronaphthylhydrazine, amido- (Bamberger and Bammann), 1889, A., 784.

Tetrahydro-α-naphthylhydrazine hydrochloride (Bamberger and Bordt), 1889, A., 717.

ac-**Tetrahydro-β-naphthylic** acetate, benzoate, sodium carbonate, chloride and phenylcarbamate (Bamberger and Lodter), 1890, A., 507.

Tetrahydronaphthylphenol (Koenigs), 1891, A., 571; (Koenigs and Mai), 1892, A., 1445.

Tetrahydronaphthylthiocarbamide, *di*-amido- (Bamberger and Bammann), 1889, A., 783.

ac-**Tetrahydro-β-naphthylxanthic acid**, sodium salt of (Bamberger and Lodter), 1890, A., 508.

Tetrahydro-*p*-oxazine (Knorr), 1889, A., 1218.

Tetrahydropapaverine and its derivatives (Goldschmiedt), 1887, A., 163.

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Tetrahydrophthalic anhydrides, Δ^1-, Δ^2-, and $\Delta^{4\text{-cistrans}}$ (v. Baeyer), 1890, A., 1280.
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Tetrahydropinene (Wallach and Berkenheim), 1892, A., 998.
Tetrahydropyrazine (Garzino), 1892, A., 633.
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Tetrahydroquinazoline, thio- (Busch), 1892, A., 1496.
Tetrahydroquininic acid (Srpek), 1890, A., 177.
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Tetrahydroquinoline, *p*-amido- (Ziegler), 1888, A., 609.
  *di*nitro- (Simon-Thomas), 1892, A., 726.
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Tetrahydroquinoline-2-carboxylic acid (Fischer and Körner), 1884, A., 1197; (Lellmann and Alt), 1887, A., 503.
Tetrahydroquinolinedimethylanilinethiosulphonic indamine (Lellmann and Boye), 1890, A., 1006.
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Tetrahydroxyanthraquinoline (Graebe and Philips), 1891, A., 1240.
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Tetrahydroxytoluene, *p*-nitro- (Kehrmann and Brasch), 1889, A., 970.
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- **Tetramethyl*tri*amidobenzophenone** (Nathanson and Müller), 1889, A., 1189.
- **Tetramethyl*di*amidochlorethoxyquinone** (Kehrmann), 1891, A., 904.
- **Tetramethyl*di*amido*di*chloronitrotriphenylmethane** (Kock), 1887, A., 837.
- **Tetramethyl*di*amidodinaphthylphenylmethane** (*phenyltetramethyldiamidodinaphthylmethane*) (Friedländer and Welmans), 1889, A., 151.
- **Tetramethyl*di*amidodiphenyl** (*tetramethylbenzidine*) (Michler and Pattinson), 1884, A., 747; (Giraud), 1890, A., 138; (Lauth), 1891, A., 457.
  - derivatives (Michler and Pattinson), 1884, A., 747.
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- **Tetramethyl*di*amidodiphenylamine,** oxidation of (Bernthsen), 1884, A., 597.
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- **Tetramethyl*di*amidodiphenylethane** (Heumann and Wiernik), 1887, A., 674; (Tröger), 1888, A., 287.
- **Tetramethyl*di*amidodiphenylheptane** (Krafft), 1887, A., 253.
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- **Tetramethyl*di*amidodiphenylmethoxymethylquinolylmethane** (Nölting), 1892, A., 190.
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- **Tetramethyldiamidodiphenylphenylamidonaphthylcarbinol** (*Victoria blue*) (Nathanson and Müller), 1889, A., 1190.
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- **Tetramethyl*di*amidodiphenylquinolylmethane** (Nölting), 1892, A., 190.
- **Tetramethyl*di*amidodiphenylthienylmethane** (Levi), 1887, A., 481.
- **Tetramethyl*di*amidodiphenyltolylmethane,** *p*-nitro- (Nölting), 1891, A., 727.
- **Tetramethyl*tri*amidodiphenyltolylmethanes** and their derivatives (Nölting), 1892, A., 187.
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- **Tetramethyl*di*amidothiobenzophenone** and its derivatives (Baither), 1887, A., 816; 1888, A., 289.
- **Tetramethyl*di*amidotoluene** (*tetramethyltolylenediamine*) (Niementowski), 1887, A., 938.
- **Tetramethyl*di*amidotriphenylethane** (Doebner and Petschow), 1888, A., 288.
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- **Tetramethyl*tri*amidotriphenylmethane,** derivatives of (Nathanson and Müller), 1889, A., 1189.
- **Tetramethylammonium** salts, action of heat on (Lawson and Collie), 1888, T., 624; P., 61.
  - bromide, chloride and sulphate, action of bromine, chlorine and iodine on (Dobbin and Masson), 1886, T., 847; P., 239.
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  - cyanide and its salts (Thompson), 1884, A., 286; (Claus and Merck), 1884, A., 338.
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  - iodide, action of bromine and chlorine on (Dobbin and Masson), 1886, T., 848.
    - action of potassium on (Thompson and Cundall), 1888, T., 761; P., 79.
  - *hept*iodide and *non*iodide (Geuther), 1887, A., 910.
  - nitrate, formation of (Duvillier and Malbot), 1885, A., 370.
- **Tetramethylanthracene** (Friedel and Crafts), 1887, A., 1102.
- **Tetramethylapionol** (Ciamician and Silber), 1890, A., 36.
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Tetramethylenecarboxylic acid (*pentenoic acid*) and its salts (Perkin), 1883, A., 1084; 1887, T., 8.
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- **Pyrometric** use of the principle of viscosity (Barus), 1888, A., 1014.
- **Thermo-regulator** (Richmond), 1884, A., 656; (Meyer), 1884, A., 883; (Ramsay and Young), 1885, T., 640; (v. Baumhauer), 1885, A., 471; (Fock), 1885, A., 950; (anon.), 1885, A., 1157; (Kreusler), 1886, A., 301; (Kahlbaum), 1887, A., 206; (Rügheimer), 1887, A., 698.
- **Thermal expansion**, method of determining, for equal quantities of heat (Dragoumis), 1891, A., 142.
  - of bodies as liquids, relation between critical temperatures and (Thorpe and Rücker), 1884, T., 135; 1887, A., 429.
  - of liquids (Konowaloff), 1888, A., 1019; (Grimaldi), 1888, A., 1143.
  - of liquid bismuth (Vicentini), 1891, A., 518; (Cattaneo), 1892, A., 259.
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  - of water (Pickering), 1891, A., 8; (Scheel), 1892, A., 7; (Marek), 1892, A., 106; (Puschl), 1892, A., 1382.
  - of acetic acid (Ramsay and Young), 1886, T., 790; P., 225.
  - of ethyl ether (Ramsay and Young), 1887, A., 320.
- **Heat conductivity** of liquids (Chree), 1888, A., 641.
  - of bismuth (Righi), 1887, A., 1009; 1888, A., 102; (v. Ettingshausen), 1888, A., 400.
  - of boric acid (Bock), 1887, A., 758.
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- **Heat conductivity** of selenium, action of light on (Bellati and Lussana), 1888, A., 98.
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  - of mixtures of ethylic alcohol and water (Henneberg), 1889, A., 459.
  - of soils (Wagner), 1884, A., 923.
- **Heats, specific,** law of variation of (Mallard and Le Chatelier), 1883, A., 845.
  - at high temperatures (Pionchon), 1887, A., 201; (Sutherland), 1889, A., 4.
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  - relation between specific gravity and, of isomerides (Colson), 1886, A., 961.
  - determination of atomic weight from (Janeček), 1887, A., 419.
  - method of determining (Thoulet and Lagarde), 1885, A., 6.
  - apparatus for the determination of, by cooling (Violle), 1883, A., 6.
  - molecular, of gases (Le Chatelier), 1888, A., 213, 772.
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  - of gases at constant volume (Joly), 1889, A., 459.
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  - of nitrogen *tet*roxide (Threlfall), 1887, A., 429.
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  - experimental determination of the ratio of, in superheated steam (Cohen), 1890, A., 205.
  - of liquids (Langlois), 1887, A., 419.
  - of liquids, calculation of (Hinrichs), 1892, A., 2.
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  of solutions of hydrobromic acid and of the solid hydrate $HBr.2H_2O$ (Roozeboom), 1887, A., 628.
  of saline solutions (Arons), 1885, A., 1101; (Gerlach), 1888, A., 894; (Mathias), 1889, A., 4.
  of supersaturated saline solutions (Bindel), 1890, A., 1042.
  of aqueous and alcoholic solutions of metallic chlorides, influence of concentration on (Blümcke), 1885, A., 8.
  of calcium and potassium chloride solutions (Drecker), 1888, A., 1010.
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  of sulphuric acid solutions (Pickering), 1889, P., 86; 1890, T., 88, 160.
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  molecular, of solids, determination of, from their solution in water and other liquids (Wiedemann), 1883, A., 704.
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  of antimony and its compounds (v. Pebal and Jahn), 1886, A., 655; (Naccari), 1888, A., 1236.
  of beryllium (Humpidge), 1885, A., 1184; 1886, A., 506.
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  of iodine chlorides (Stortenbeker), 1892, A., 1387.
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  of lauric and myristic acids (Stohmann and Wilsing), 1885, A., 1177.
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Thermochemistry:—*Heat of formation=f.; of transformation=t.; of decomposition=d.; of dissociation=dis.; of combination=cb.; of combustion =c.; of neutralisation=n.; of substitution=sb.; of hydration=h.*

- **Latent heat of vaporisation** (Gerlach), 1889, A., 813.
  - relation of specific inductive capacity to (Obach), 1892, A., 258.
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  - of liquefied gases, measurement of (Chappuis), 1887, A., 627; 1888, A., 733; (Mathias), 1888, A., 773.
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  - of sulphuric *mono*chloride (Ogier), 1883, A., 642.
  - of homologous carbon compounds (Schiff), 1887, A., 9.
  - of acetic acid (Ramsay and Young), 1886, T., 790; P., 225.
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- **Heat of formation** (Berthelot), 1885, A., 868; (Colley), 1890, A., 681.
  - (*thermodynamic equivalents*) (de Landero and Prieto), 1887, A., 99.
  - and the law of thermal substitution constants (Tommasi), 1883, A., 143; 1884, A., 883; 1885, A., 8; (Berthelot), 1884, A., 702.
- **Heat of transformation** in double decomposition (van't Hoff and Reicher), 1889, A., 930.
- **Heat of chemical combination,** influence of temperature on (Pickering), 1886, T., 260; P., 161.
- **Heat of combustion** (Gerlach), 1889, A., 814.
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- **Thermochemical data** for acetaldehyde and its polymerides (*c.*) (Brühl), 1891, A., 633.
  - for acetaldehyde into paracetaldehyde (*t.*) (Franchimont), 1883, A., 454.
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- **Thermochemical data** for acetic acid (*c.*) (Jahn), 1890, A., 99; (*c.* and *f.*) (Berthelot and Matignon), 1892, A., 1139.
  - for acetic acid, mercury salt of (*f.*) (Berthelot), 1884, A., 706.
  - for acetocarbamide (*c.* and *f.*) (Matignon), 1891, A., 1448.
  - for acids of the aromatic series (*n.*) (Berthelot), 1886, A., 8; (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1096.
  - for acids of the aromatic series, influence of the nitrosyl amidogen groups on the (*n.*) (Alexéeff and Werner), 1890, A., 439.
  - for acids of the fatty series (*c.*) (Stohmann), 1885, A., 857; 1886, A., 296; (Stohmann and Rodatz), 1885, A., 1177; 1886, A., 296; (Luginin), 1886, A., 757; (Stohmann and Langbein), 1891, A., 11.
  - for acids of the oxalic series (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1097; (Ossipoff), 1890, A., 680.
  - for acids of the oxalic and lactic series (*c.*) (Luginin), 1889, A., 5.
  - for homologous and isomeric acids (*n.*) (Gal and Werner), 1887, A., 95.
  - for solid dibasic acids, relations of, to those of the gaseous hydrocarbons (*c.*) (Stohmann), 1891, A., 252.
  - for dibasic organic acids (*n.*) (Massol), 1891, A., 968; 1892, A., 395; (*c.* and *f.*) (Stohmann and Kleber), 1892, A., 1041.
  - for albuminoids (*c.*) (Stohmann), 1885, A., 857.
  - for alcohols of the fatty series (*c.*) (Stohmann), 1886, A., 295.
  - for the polybasic alcohols (*c.* and *f.*) (Stohmann and Langbein), 1892, A., 763.
  - for the alkaline earths (*h.*) (Thomsen), 1884, A., 250.
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  - for alkyl oxides (*f.*) (de Forcrand), 1884, A., 142, 546; 1885, A., 1102; 1887, A., 204, 318, 319.

Thermochemistry:—*Heat of formation=f.; of transformation=t.; of decomposition=d.; of dissociation=dis.; of combination=cb.; of combustion=c.; of neutralisation=n.; of substitution=sb.; of hydration=h.*

Thermochemical data for alkylene oxides (*c.*) (Brühl), 1891, A., 633.
- for allantoin, alloxan and alloxantin (*c.* and *f.*) (Matignon), 1891, A., 1448.
- for the compounds of aluminium bromide with hydrocarbons (*f.*) (Gustavson), 1885, A., 472.
- for aluminium fluoride (*n.*) (Petersen), 1890, A., 680.
- for aluminium oxide and hydroxide (*f.*) (Baille and Féry), 1890, A., 110.
- for amides (*c.* and *f.*) (Berthelot and Fogh), 1890, A., 1359.
- for aromatic amines (*n.*) (Vignon), 1888, A., 1013.
- for fatty amines (*c.*) (Muller), 1886, A., 409; (*n.*) (Muller), 1889, A., 811.
- for some salts of the fatty amines in dilute solutions (*f.*) (Muller), 1885, A., 716.
- for ammonia with silicon *tetra*fluoride (*cb.*) (Truchot), 1885, A., 626.
- for ammonium sulphite and *di*sulphite (*f.*) (de Forcrand), 1885, A., 471.
- for aniline (*f.*) (Petit) 1888, A., 773.
- for aniline salts (*f.* and *n.*) (Berthelot), 1890, A., 1361.
- for aniline *di*chromate (*f.*) (Girard and L'Hôte), 1889, A., 562.
- for antimony halogen compounds and oxides (*f.*) (Thomsen), 1883, A., 544; (Guntz), 1884, A., 707, 884, 1246; 1885, A., 1101.
- for antimony hydride (*f.*) (Berthelot and Petit), 1889, A., 666.
- for allotropic forms of arsenic (*cb.*) (Berthelot and Engel), 1890, A., 679.
- for arsenic halogen compounds (*f.*) (Thomsen), 1883, A., 544; (Guntz), 1885, A., 1101.
- for asparagin (*c.*) (Stohmann), 1885, A., 857.
- for aspartic acid (*c.* and *f.*) (Berthelot and André), 1890, A., 936; (Berthelot), 1891, A., 967.
- for atropic acid (*c.*) (Ossipoff), 1889, A., 460.

Thermochemical data for azoimide (*n.* and *f.*) (Berthelot and Matignon), 1892, A., 261; (*f.*) (Bach), 1892, A., 933.
- for bases where dissociation cannot take place (*n.*) (van Deventer and Reicher), 1890, A., 553.
- for organic bases in relation to Berthollet's laws (*n.*) (Berthelot), 1890, A., 1363; (Colson), 1890, A., 1367, 1368; 1891, A., 377.
- for benzene (*c.* and *f.*) (Stohmann, Rodatz and Herzberg), 1886, A., 409; (Thomsen), 1886, A., 842; (Stohmann, Kleber and Langbein), 1889, A., 1042; (*c.*) (Stohmann), 1886, A., 842; (Brühl), 1891, A., 633.
- for benzene and its molecular refraction compared with those of dipropargyl (*c.*) (Brühl), 1892, A., 1436.
- for benzene to the acetic series (*t.*) (Berthelot and Recoura), 1887, A., 1011.
- for the solid isomeride of benzene (*c.*) (Luginin), 1888, A., 893.
- for benzoic acid (*c.*) (Stohmann), 1885, A., 857; (Berthelot and Recoura; Berthelot and Luginin), 1887, A., 762; (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1096.
- for benzoyl compounds (*c.*) (Stohmann, Rodatz and Herzberg), 1887, A., 878; 1888, A., 333.
- for benzylamine (*f.*) (Petit), 1888, A., 1239.
- for beryllium fluoride (*n.*) (Petersen), 1890, A., 680.
- for bismuth halogen compounds and oxides (*f.*) (Thomsen), 1883, A., 544.
- for borneols (*c.*) (Luginin), 1889, A., 328.
- for bromides by substitution (*f.*) (Berthelot and Werner), 1884, A., 883.
- for bromine (*sb.*) (Berthelot and Werner), 1884, A., 883; 1885, A., 627.
- for bromine and iodine with magnesium (*cb.*) (Beketoff), 1892, A., 762.
- for cadmium oxide (*n.*) (Thomsen), 1884, A., 263.

Thermochemistry:—*Heat of formation = f.; of transformation = t.; of decomposition = d.; of dissociation = dis.; of combination = cb.; of combustion = c.; of neutralisation = n.; of substitution = sb.; of hydration = h.*

Thermochemical data for the camphene series (*c.* and *f.*) (Berthelot and Matignon), 1891, A., 1313.
  for camphoric acids (*n.*) (Berthelot), 1885, A., 1178; (Gal and Werner), 1887, A., 205; (*c.*) (Luginin), 1889, A., 6; (*c.* and *f.*) (Stohmann and Kleber), 1892, A., 1041.
  for camphors (*c.*) (Luginin), 1889, A., 328.
  for cyano- and nitro-camphors (*f. c.* and *n.*) (Berthelot and Petit), 1889, A., 1098.
  for carbamide (*c.*) (Stohmann), 1885, A., 857; (*c.* and *f.*) (Berthelot and Petit), 1890, A., 206.
  for the carbohydrates (*c.*) (Stohmann), 1885, A., 857; (*c.* and *f.*) (Berthelot and Vieille), 1886, A., 757; (Stohmann and Langbein), 1892, A., 763.
  for carbon (*c.*) (Berthelot and Petit), 1889, A., 811.
  for carbon with oxygen (*cb.*) (Boillot), 1884, A., 141.
  for carbon compounds (*f.*) (Thomsen), 1883, A., 543; (Brühl), 1887, A., 423; (*c.*) (Müller-Erzbach), 1883, A., 1044; (Berthelot and Vieille), 1885, A., 326; (Luginin), 1885, A., 327; (Diakonoff), 1886, A., 115; (Thomsen), 1887, A., 761; (Stohmann), 1887, A., 878, 1011; 1888, A., 1013; 1891, A., 251; (Ossipoff), 1889, A., 5.
  for carbon compounds and their relation to their constitution (*c.*) (Dieffenbach), 1890, A., 1206; (Thomsen), 1891, A., 632.
  for carbon *tetra*chloride and *mon*oxide (*f.*) (Thomsen), 1883, A., 544.
  for carbon *di*sulphide (*c.* and *f.*) (Thomsen), 1884, A., 249; (Berthelot and Matignon), 1890, A., 1361.
  for carbonic ethers (*c.*) (Luginin), 1884, A., 547.
  for carbonyl chloride (*f.*) (Thomsen), 1884, A., 250.
  for carbonyl sulphide (*c.* and *f.*) (Thomsen), 1884, A., 249.

Thermochemical data for alkaline carbonates in very dilute solution (*f.*) (Muller), 1889, A., 810.
  for charcoal (*c.*) (Berthelot and Vieille), 1885, A., 326.
  for chlorides and sulphates in aqueous solution, relation between (*f.*) (Fay), 1888, A., 401.
  for hydrated metallic chlorides (*f.*) (Sabatier), 1889, A., 1043.
  for *per*chloric acid and its salts (*d. f.* and *n.*) (Berthelot), 1883, A., 8.
  for organic chlorine compounds (*c.* and *f.*) (Berthelot and Matignon), 1891, A., 1311.
  for chromic acid and its salts (*f.*) (Berthelot), 1883, A., 642.
  for chromous into chromic chloride (*t.*) (Recoura), 1885, A., 1102.
  for the cinnamic acids (*c.*) (Ossipoff), 1889, A., 460; (Stohmann, Kleber and Langbein), 1889, A., 1096; (Liebermann), 1892, A., 469.
  for citraconic acid (*n.*) (Gal and Werner), 1887, A., 205; (*c.*) (Luginin), 1888, A., 893.
  for citric acid (*c.*) (Stohmann), 1885, A., 857; (*n.*) (Gal and Werner), 1887, A., 205; (Massol), 1892, A., 763.
  for coal (*c.*) (Scheurer-Kestner), 1884, A., 122; 1885, A., 848, 1020; 1888, A., 774; 1891, A., 520; (Schwackhöfer), 1885, A., 691; (Alexéeff), 1886, A., 757.
  for products of the distillation of coal (*c.*) (Mahler), 1892, A., 395.
  for coal-gas (*c.*) (Witz), 1885, A., 472; (Mahler), 1892, A., 396.
  for colloids (*h.*) (Wiedemann and Luedeking), 1885, A., 1031.
  for some soluble compounds and the law of thermal substitution constants (*f.*) (Tommasi), 1885, A., 8.
  for *iso*cuminic acid (*c.*) (Berthelot and Luginin), 1887, A., 762.
  for diazo-derivatives (*f.*) (Vignon), 1888, A., 774.
  for *iso*dibutylene (*c.*) (Malbot), 1890, A., 320.
  for electrolytes (*dis.*) (Arrhenius), 1889, A., 1044; 1892, A., 931.

Thermochemistry:—*Heat of formation=f.; of transformation=t.; of decomposition=d.; of dissociation=dis.; of combination=cb.; of combustion=c.; of neutralisation=n.; of substitution=sb.; of hydration=h.*

Thermochemical data for erythritol (*c.*) (Stohmann), 1885, A., 857; (Luginin), 1889, A., 668.
- for erythroxides (*f.*) (de Forcrand), 1890, A., 935; 1891, A., 1312.
- for ethane (*f.*) (Thomsen), 1883, A., 545.
- for ethereal salts of some fatty acids (*c.*) (Luginin), 1885, A., 327; 1886, A., 192, 757.
- for ethyl ether (*c.*) (Stohmann), 1887, A., 425.
- for ethylene oxide (*c.* and *f.*) (Berthelot), 1883, A., 275.
- for ethylene oxide with hydrogen chloride (*cb.*) (Berthelot), 1883, A., 174.
- for ethylenic *per*chloride (*f.*) (Thomsen), 1883, A., 544.
- for ethylic alcohol (*c.* and *f.*) (Berthelot and Matignon), 1892, A., 1139.
- for ethylic acetocyanacetate, benzoylcyanacetate, and cyanomalonate (*n.*) (Haller and Guntz), 1888, A. 894.
- for explosive mixtures, some relations between specific heats, dissociation, pressure and (*c.*) (Berthelot), 1883, A., 771.
- for fats (*c.*) (Stohmann), 1885, A., 857; (*f.*) (Stohmann and Langbein), 1891, A., 11.
- for ferrous sulphide (*f.*) (Müllenhoff), 1885, A., 950.
- for fluorides (*f.*) (Guntz), 1884, A., 5, 545, 546; (Tommasi; Berthelot), 1884, A., 545; (*n.*) (Petersen), 1890, A., 1.
- for fluorine compounds (*f.* and *dis.*) (Guntz), 1884, A., 1245.
- for fluorine with hydrogen (*cb.*) (Berthelot and Moissan), 1889, A., 1096.
- for formylcarbamide (*c.* and *f.*) (Matignon), 1891, A., 1448.
- for food constituents and their derivatives (*c.*) (Stohmann), 1885, A., 857; (Stohmann and Langbein), 1892, A., 4.
- for formic acid (*c.*) (Jahn), 1890, A., 99; (*c.* and *f.*) (Berthelot and Matignon), 1892, A., 1139.
- for fumaric acid (*n.*) (Gal and Werner), 1887, A., 205; (*c.*) (Luginin), 1888, A., 893; (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1097; (Stohmann), 1892, A., 1041.

Thermochemical data for certain gases (*cb.*) (Raabe), 1883, A., 274.
- for glucose (*c.*) (Berthelot and Recoura), 1887, A., 761.
- for glutaric acid (*n.*) (Massol), 1892, A., 1141.
- for glyceric acid (*n.*) (Gal and Werner), 1887, A., 205.
- for glycerol (*c.*) (Stohmann), 1885, A., 857.
- for potassium glyceroxide (*f.*) (de Forcrand), 1887, A., 320.
- for glycocine (*c.*) (Stohmann), 1885, A., 857.
- for *mono*- and *di*-sodium glycol (*f.*) (de Forcrand), 1888, A., 1238; 1892, A., 421, 576.
- for glycollic acid and its salts (*f.*) (de Forcrand), 1883, A., 644, 708, 774, 775; (Tommasi), 1883, A., 708, 775.
- for glycollide (*h.*) (de Forcrand), 1884, A., 547.
- for glyoxal ammonium hydrogen sulphite (*f.*) (de Forcrand), 1885, A., 627.
- for glyoxal barium and potassium hydrogen sulphites (*f.*) (de Forcrand), 1884, A., 989.
- for glyoxylic acid and its salts (*n.* and *f.*) (de Forcrand), 1886, A., 297.
- for graphitic and pyrographitic oxides (*c.*) (Berthelot and Petit), 1890, A., 448.
- for guanidine and nitroguanidine (*c.*) (Matignon), 1892, A., 1142.
- for haloid salts (*dis.*, *f.*, *n.* and *t.*) (Berthelot), 1884, A., 656.
- for hemipinimide (*c.* and *t.*) (Liebermann), 1892, A., 459.
- for hexadecylic alcohol and palmitate (*c.*) (Stohmann), 1885, A., 857.
- for hippuric acid (*c.*) (Stohmann), 1885, A., 857.
- for humic acid from sugar (*c.* and *n.*) (Berthelot and André), 1891, A., 1456.
- for hydrazine (*n.*) (Berthelot and Matignon), 1892, A., 261; (Bach), 1892, A., 933; (*f.*) (Thomsen), 1892, A., 1143,

Thermochemistry :—*Heat of formation = f.; of transformation = t.; of decomposition = d.; of dissociation = dis.; of combination = cb.; of combustion = c.; of neutralisation = n.; of substitution = sb.; of hydration = h.*

Thermochemical data for aromatic hydrocarbons (*c.*) (Stohmann, Rodatz and Herzberg), 1887, A., 427; (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1042.
  for solid hydrocarbons (*c.* and *f.*) (Berthelot and Vieille), 1886, A., 756.
  for hydrogen compounds (*f.*) (Tommasi), 1885, A., 716.
  for hydrogen with fluorine (*cb.*) (Berthelot and Moissan), 1889, A., 1096.
  for hydrogen with oxygen (*cb.*) (Boillot), 1885, A., 8.
  for hydrogen chloride with ethylene oxide (*cb.*) (Berthelot), 1883, A., 174.
  for hydroxybenzenes (*c.*) (Stohmann, Rodatz and Herzberg), 1886, A., 655.
  for hydroxybenzoic acids (*f.*, *n.* and *t.*) (Berthelot and Werner), 1885, A., 1103; (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1096.
  of hydroxyl for hydrogen (*sb.*) (Stohmann), 1886, A., 656.
  for hydroxylamine and its salts (*f.*) (Berthelot and André), 1890, A., 934.
  for hyponitrites (*f.*) (Berthelot and Ogier), 1883, A., 423; (Berthelot), 1889, A., 930.
  for inosite (*c.* and *f.*) (Berthelot and Recoura), 1887, A., 1011; (Berthelot and Matignon), 1890, A., 1360; (Stohmann and Langbein), 1892, A., 764.
  for isomeric inosites (*t.*) (Berthelot), 1890, A., 1041.
  for iodine and bromine with magnesium (*cb.*) (Beketoff), 1892, A., 762.
  for iodine chlorides (*f.*) (Thomsen), 1883, A., 543; (*t.*) (Stortenbeker), 1892, A., 1387.
  for itaconic acid (*n.*) (Gal and Werner), 1887, A., 205; (*c.*) (Luginin), 1888, A., 893.
  for ketones (*c.*) (Luginin), 1884, A., 547.
  for lauric acid (*c.*) (Stohmann and Rodatz), 1885, A., 1176.
  for double salts of lead and potassium iodides (*f.*) (Berthelot), 1883, A., 275.

Thermochemical data for lead oxychlorides and oxybromides (*f.*) (André), 1884, A., 384.
  for lithium bromide (*f.*) (Bodisco), 1889, A., 1098.
  for lithium iodide (*f.*) (Bodisco), 1889, A., 329.
  for lithium oxide (*f.*) (Beketoff), 1884, A., 1247.
  for magnesium compounds (*f.*) (Berthelot), 1887, A., 96.
  for magnesium with bromine and iodine (*cb.*) (Beketoff), 1892, A., 762.
  for malates (*f.* and *n.*) (Massol), 1892, A., 260.
  for maleic acid (*n.*) (Gal and Werner), 1887, A., 205; (*c.*) (Luginin), 1888, A., 893; (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1097; (Stohmann and Kleber), 1892, A., 1041.
  for maleic anhydride (*h.*) (Ossipoff), 1890, A., 680.
  for malic acid (*n.*) (Gal and Werner), 1887, A., 96, 205; (*f.* and *n.*) (Massol), 1892, A., 260.
  for malonic acid (*n.*) (Gal and Werner), 1887, A., 96; (Massol), 1888, A., 1240; 1889, A., 857.
  for malonates (*f.*) (Massol), 1889, A., 958; 1890, A., 1396, 1397.
  for sodium mannitol (*f.*) (de Forcrand), 1892, A., 800.
  for meconic acid (*n.*) (Berthelot), 1886, A., 8; (Gal and Werner), 1887, A., 206.
  for mellitic acid (*n.*) (Berthelot), 1886, A., 8; (Gal and Werner), 1887, A., 206; (*c.*) (Stohmann, Kleber and Langbein), 1889, A., 1096.
  for mercury compounds (*f.*) (Thomsen), 1888, A., 1011; (Nernst), 1888, A., 1012.
  for mercury oxybromides and oxychlorides (*f.*) (André), 1884, A., 707, 884.
  for mesaconic acid (*n.*) (Gal and Werner), 1887, A., 205; (*c.*) (Luginin), 1888, A., 893.
  for methane (*f.*) (Thomsen), 1883, A., 544.
  for methylaniline (*f.*) (Petit), 1888, A., 1239.

THERMOCHEMISTRY :—*Heat of formation=f.; of transformation=t.; of decomposition=d.; of dissociation=dis.; of combination=cb.; of combustion =c.; of neutralisation=n.; of substitution=sb.; of hydration=h.*

Thermochemical data for *di-*, *tri-*, *tetra-*, *penta-* and *hexa*-methylene rings (*c.* and *f.*) (STOHMANN and KLEBER), 1892, A., 1041.
- for methylic alcohol and solid methyl salts (*c.* and *f.*) (STOHMANN, KLEBER and LANGBEIN), 1890, A., 101.
- for methylic alcohol with sodium (*cb.*) (DE FORCRAND), 1885, A., 1031.
- for methylmalonic acid (*n.*) (MASSOL), 1892, A., 1140.
- for methylsuccinic acid (*c.*) (LUGININ), 1889, A., 5; (*c.* and *f.*) (STOHMANN, KLEBER and LANGBEIN), 1889, A., 1097; (*n.*) (MASSOL), 1892, A., 1140.
- for rock-forming minerals (*f.*) (DIEULAFAIT), 1886, A., 35.
- for *per*molybdic acid (*f.*) (PÉCHARD), 1892, A., 1383.
- for myristic acid (*c.*) (STOHMANN and RODATZ), 1885, A., 1176.
- for naphthalene (*c.* and *f.*) (BERTHELOT and RECOURA; BERTHELOT and LUGININ), 1887, A., 762; (STOHMANN, KLEBER and LANGBEIN), 1889, A., 1042.
- for nicotine (*n.*) (COLSON), 1890, A., 101.
- for nitriles (*c.* and *f.*) (BERTHELOT and PETIT), 1889, A., 812.
- for nitrobenzenes (*c.* and *f.*) (PETIT), 1888, A., 1013; (BERTHELOT and MATIGNON), 1892, A., 4.
- for nitrogen selenide (*d.*) (BERTHELOT and VIEILLE), 1883, A., 707.
- for nitrogenous compounds derived from albuminoids (*c.* and *f.*) (BERTHELOT and ANDRÉ), 1890, A., 936; (*c.*) (BERTHELOT and ANDRÉ), 1890, A., 937.
- for the nitro-group (*sb.*) (MATIGNON), 1892, A., 1141.
- for the nononaphthenes (*c.*) (OSSIPOFF), 1889, A., 6, 460.
- for olefines (*c.*) (GROSHANS), 1886, A., 498.
- for the oxime of opianic anhydride (*c.* and *t.*) (LIEBERMANN), 1892, A., 459.
- for oxalic acid (*c.*) (STOHMANN), 1885, A., 857; (JAHN), 1890, A., 100; (*n.*) (GAL and WERNER), 1887, A., 96.

Thermochemical data for oxalic acid, mercury salt of (*f.*) (BERTHELOT), 1884, A., 706.
- for oxaluric acid (*c.* and *f.*) (MATIGNON), 1891, A., 1449.
- for oxygen with carbon (*cb.*) (BOILLOT), 1884, A., 141.
- for oxygen with hydrogen (*cb.*) (BOILLOT), 1885, A., 8.
- for parabanic acid (*c.* and *f.*) (MATIGNON), 1891, A., 1449.
- for paraffins (*c.*) (STOHMANN), 1885, A., 857; (*c.* and *f.*) (GROSHANS), 1886, A., 498.
- for phenol (*c.*) (STOHMANN), 1885, A., 857; (BERTHELOT and LUGININ), 1887, A., 762.
- for phenols (*n.*) (BERTHELOT and WERNER), 1885, A., 628; (BERTHELOT), 1886, A., 6, 7; (*c.* and *f.*) (STOHMANN, RODATZ and HERZBERG), 1887, A., 98; (STOHMANN and LANGBEIN), 1892, A., 763.
- for phenyl ethers (*c.* and *f.*) (STOHMANN, RODATZ and HERZBERG), 1887, A., 428.
- for phenylenediamine salts (*f.*) (VIGNON), 1888, A., 1012; (*n.*) (VIGNON), 1889, A., 1099.
- for phosphates (*f.*) (BERTHELOT), 1887, A., 94; (JOLY), 1887, A., 202, 877.
- for hypophosphoric acid (*n.*) (JOLY), 1886, A., 408.
- for phosphorus chlorides (*f.*) (THOMSEN), 1883, A., 544; 1884, A., 250.
- for phthalic acid (*c.*) (STOHMANN), 1885, A., 857.
- for phthalates (*f.*) (COLSON), 1885, A., 1104.
- for picrates (*f.*, *n.* and *h.*) (TSCHELZOFF), 1885, A., 1103; 1886, A., 841; (*f.*) (TOMMASI), 1886, A., 408.
- for *n*-pimelic acid (*c.* and *f.*) (STOHMANN, KLEBER and LANGBEIN), 1889, A., 1097; (STOHMANN and KLEBER), 1892, A., 1041.
- for piperidine (*n.*) (COLSON), 1890, A., 101.
- for platinic bromide and its derivatives (*f.*) (PIGEON), 1892, A., 3.
- for platinic chloride (*f.*) (PIGEON), 1890, A., 439.

Thermochemistry:—*Heat of formation=f.; of transformation=t.; of decomposition=d.; of dissociation=dis.; of combination=cb.; of combustion=c.; of neutralisation=n.; of substitution=sb.; of hydration=h.*

Thermochemical data for potassammonium (*f.*) (Joannis), 1890, A., 319.
  for potassium salts containing sulphur (*f.*) (Berthelot), 1883, A., 706.
  for potassium oxide (*f.*) (Beketoff), 1884, A., 1247.
  for propionic acid (*c.*) (Jahn), 1890, A., 100; (*n.*) (Massol), 1891, A., 1313.
  for alkali propionates (*n.*) (Massol), 1891, A., 1313.
  for pyridine (*n.*) (Colson), 1890, A., 101.
  for pyrocatechol (*c.*) (Stohmann), 1885, A., 857.
  for *di*sodium pyrocatechol (*n.*) (de Forcrand), 1892, A., 1185.
  for the pyrocitric acids (*c.*) (Luginin), 1888, A., 893.
  for pyrogallol (*c.*) (Stohmann), 1885, A., 857; (Berthelot and Luginin), 1887, A., 762.
  for pyrogallols (*f.* and *n.*) (de Forcrand), 1892, A., 1313, 1446.
  for quercitol and quinic acid (*c.* and *f.*) (Berthelot and Recoura), 1887, A., 1011.
  for quinol (*c.*) (Berthelot and Luginin), 1887, A., 762.
  for sodium quinol (*n.*) (de Forcrand), 1892, A., 1185.
  for quinone (*c.*) (Berthelot and Recoura; Berthelot and Luginin), 1887, A., 762.
  for resorcinol (*c.*) (Stohmann), 1885, A., 857.
  for sodium resorcinol (*n.*) (de Forcrand), 1892, A., 1185.
  for rubidium (*c.*) (Beketoff), 1890, A., 679.
  for salicylic acid (*c.*) (Stohmann), 1885, A., 857; (Berthelot and Recoura), 1887, A., 762.
  for salts (*h.*) (Pickering), 1884, A., 803; 1886, T., 417; P., 257; 1887, T., 75; (*f.*) (Pickering), 1886, T., 287; P., 164; (Potilizin), 1886, A., 116; (van Deventer and Reicher), 1892, A., 262.
  for selenides (*f.*) (Fabre), 1886, A., 961, 962.
  for vitreous into metallic selenium (*t.*) (Fabre), 1886, A., 840.
  for selenium chloride (*f.*) (Thomsen), 1883, A., 543.

Thermochemical data for alkaline silicofluorides (*f.*) (Truchot), 1884, A., 884.
  for silicon *tetra*fluoride with ammonia (*cb.*) (Truchot), 1885, A., 626.
  for silver chloride (*f.*) (Richards), 1888, A., 400.
  for silver iodide and its compounds with cuprous and lead iodides (*t.*) Bellati and Romanese), 1883, A., 274.
  for sodammonium (*f.*) (Joannis), 1890, A., 319.
  for sodium with methylic alcohol (*cb.*) (de Forcrand), 1885, A., 1031.
  for sodium oxide (*f.*) (Beketoff), 1884, A., 1247.
  for sorbic acid (*c*) (Ossipoff), 1889, A., 460.
  for stannic acid and metastannic acid (*n.*) (Vignon), 1889, A., 833.
  for stilbene (*c.*) (Ossipoff), 1889, A., 460.
  for succinic acid (*n.*) (Gal and Werner), 1887, A., 96.
  for *iso*succinic acid (*c.* and *f.*) (Stohmann, Kleber and Langbein), 1889, A., 1097; (*n.*) (Massol), 1892, A., 1140.
  for alkaline succinates and *iso*succinates (*f.*) (Tanatar), 1890, A., 320.
  for sugars (*c.* and *f.*) (Berthelot and Matignon), 1890, A., 1360; (Fogh), 1892, A., 933.
  for sulphates (*f.* and *t.*) (Pickering), 1884, T., 686; 1886, T., 1; (*f.*) (de Forcrand), 1884, A., 4; (Illingworth and Howard), 1885, A., 339.
  for sulphates and chlorides in aqueous solution, relation between (*f.*) (Fay) 1888, A., 401.
  for alkaline sulphites (*f.* and *n.*) (Berthelot), 1883, A., 704.
  for pyrosulphites (*f.*) (Berthelot), 1883, A., 705.
  for sulphur compounds (*c.* and *f.*) (Berthelot and Matignon), 1890, A., 1361.
  for sulphur chloride (*f.*) (Thomsen), 1883, A., 543.
  for sulphur oxychloride (*f.*) (Thomsen), 1884, A., 250.

THERMOCHEMISTRY:—*Heat of formation = f.; of transformation = t.; of decomposition = d.; of dissociation = dis.; of combination = cb.; of combustion = c.; of neutralisation = n.; of substitution = sb.; of hydration = h.*

Thermochemical data for sulphuric acid (*n.*) (PICKERING), 1889, T., 323; P., 79.
for *per*sulphuric acid and its salts (*f.* and *n.*) (BERTHELOT), 1892, A., 931.
for pyrosulphuric chloride (*f.*) (KONOWALOFF), 1884, A., 250.
for sulphurous acid (*n.*) (BERTHELOT), 1883, A., 704.
for tartar emetic (*f.*) (GUNTZ), 1887, A., 544.
for *d*- and *l*-tartaric acids (*c.*) (STOHMANN), 1885, A., 857; (*n.*) (GAL and WERNER), 1887, A., 96; (JAHN), 1891, A., 969.
for tartronic acid (*n.*) (GAL and WERNER), 1887, A., 96.
for crystallised telluride (*f.*) (FABRE), 1887, A., 1010.
for the allotropic modification of tellurium (*t.*) (BERTHELOT and FABRE), 1887, A., 761.
for tellurium chloride (*f.*) (THOMSEN), 1883, A., 543.
for terebic acid (*c.*) (OSSIPOFF), 1889, A., 460.
for terephthalic acids and their salts (*c.* and *f.*) (STOHMANN and KLEBER), 1891, A., 376, 1147.
for terpilene, terpin hydrate and terpin (*c.*) (LUGININ), 1889, A., 328.
for tetric acid (*n.*) (BERTHELOT), 1886, A., 8.
for toluidines (*f.*) (PETIT), 1888, A., 1239.
for tri*iso*butylene (*c.*) (MALBOT), 1890, A., 320.
for tricarballylic acid (*c.*) (LUGININ), 1889, A., 668.
for potassium tricarballylates (*f.*) (MASSOL), 1892, A., 762.
for trimethylene (*c.*) (BRÜHL), 1891, A., 633.
for trimyristin (*c.*) (STOHMANN), 1885, A., 857.
for uric acid (*c.*) (STOHMANN), 1885, A., 857; (*f.*) (MATIGNON), 1890, A., 1040.
for alkaline urates (*f.*) (MATIGNON), 1890, A., 1040.
for cooked vegetables (*c.*) (WILLIAMS), 1892, T., 240.
for water-generator gas and carbonic anhydride-generator gas (*c.*) (NAUMANN), 1892, A., 673.

Thermochemical data for the water molecule (*dis.*) (WIEDEMANN), 1883, A., 547.
for wood (*c.*) (GOTTLIEB), 1884, A., 477.
for zinc carbonate (*f.*) (DIEULAFAIT), 1886, A., 132.
for zinc ethyl (*f.*) (GUNTZ), 1888, A., 15.

Heat of solution, theory of (DIETERICI), 1892, A., 676, 765.
law of (OSTWALD), 1888, A., 1020.
variation of solubility with variations in (LE CHATELIER), 1887, A., 548; (CHANCEL and PARMENTIER), 1887, A., 632.
of the alkaline earths and the alkalis (THOMSEN), 1884, A., 250.
of alkylamines (COLSON), 1891, A., 377.
of aluminium bromide in toluene (GUSTAVSON), 1885, A., 472.
of allantoin, alloxan and alloxantin (MATIGNON), 1891, A., 1448.
of amides (BERTHELOT and FOGH), 1890, A., 1360.
of aniline salts (BERTHELOT), 1890, A., 1361.
of aspartic acid (BERTHELOT), 1891, A., 967.
of acids of the benzene series (BERTHELOT), 1886, A., 8.
of certain compounds of the benzene series (BERTHELOT), 1885, A., 1177.
of bromine in different liquids (PICKERING), 1888, T., 865; P., 92.
of *di*bromomalonic acid and its salts (MASSOL), 1892, A., 1140.
of calcium chloride (PICKERING), 1888, P., 35; 1889, P., 86; 1891, P., 105.
of cyano- and nitro-camphors (BERTHELOT and PETIT), 1889, A., 1098.
of carbon compounds in various alcohols (TIMOFÉEFF), 1891, A., 1313.
of the *per*chlorates (BERTHELOT), 1883, A., 8.
of chlorides in different liquids (PICKERING), 1888, T., 865; P., 92.
of hydrated metallic chlorides (SABATIER), 1889, A., 1043.

Thermochemistry:—
Heat of solution of chromates (Sabatier), 1886, A., 962.
of colloids (Wiedemann and Luedeking), 1885, A., 1031.
of ethoxides (de Forcrand), 1884, A., 4, 142.
of ethylene oxide (Berthelot), 1883, A., 275.
of fluorine compounds (Guntz), 1884, A., 1245.
of hydrofluoric acid (Guntz), 1884, A., 544.
of fumaric acid (Gal and Werner), 1887, A., 205.
of a gas (Pagliani), 1890, A., 846.
of gases in liquids (Pickering), 1892, A., 1042.
of glutaric acid (Massol), 1892, A., 1141.
of glyceroxides (de Forcrand), 1887, A., 8; 1888, A., 642.
of *mono*- and *di*-sodium glycol (de Forcrand), 1888, A., 1238; 1892, A., 421.
of glycollic acid and its salts (de Forcrand), 1883, A., 644, 774; (Tommasi), 1883, A., 775.
of glyoxylic acid and its salts (de Forcrand), 1886, A., 297.
of guanidine and nitroguanidine (Matignon), 1892, A., 1142.
of hydrazine (Berthelot and Matignon), 1892, A., 261; (Bach), 1892, A., 933.
of hydroxybenzoic acids (Berthelot and Werner), 1885, A., 1103.
of iodine in different liquids (Pickering), 1888, T., 873, 877; P., 92.
of cast iron containing silicon and aluminium (Osmond), 1892, A., 19.
of itaconic acid (Gal and Werner), 1887, A., 205.
of lithium bromide (Bodisco), 1889, A., 1098.
of lithium iodide (Bodisco), 1889, A., 329.
of maleic acid (Gal and Werner), 1887, A., 205.
of malic acid and its salts (Gal and Werner), 1887, A., 96; (Massol), 1892, A., 260.
of malonic acid (Gal and Werner), 1887, A., 96.
of malonates (Massol), 1888, A., 1239; 1889, A., 958.
of malonic chloride (Berthelot), 1891, A., 967.

Thermochemistry:—
Heat of solution of sodium mannitol (de Forcrand), 1892, A., 800.
of mesaconic acid (Gal and Werner), 1887, A., 205.
of sodium methoxide (de Forcrand), 1885, A. 1032.
of nicotine (Colson), 1890, A., 101.
of nitrates in different liquids (Pickering), 1888, T., 865; P., 92.
of parabanic acid (Matignon), 1891, A., 1449.
of phenol (de Forcrand), 1892, A., 1042.
of phenols (Berthelot and Werner), 1885, A., 628; (Berthelot), 1886, A., 6, 7.
of phenylenediamines (Vignon), 1889, A., 1099.
of phosphorus *tri*fluoride (Berthelot), 1885, A., 328.
of hypophosphoric acid (Joly), 1886, A., 408.
of picrates (Tschelzoff), 1885, A., 1103; 1886, A., 841.
of piperidine (Colson), 1890, A., 101.
of platinic chloride and its compounds (Pigeon), 1891, A., 966.
of propionic acid and alkali propionates (Massol), 1891, A., 1313.
of sodium *iso*propoxide (de Forcrand), 1892, A., 674.
of pyridine (Colson), 1890, A., 101.
of *mono*- and *di*-sodium pyrocatechol (de Forcrand), 1892, A., 1184, 1185.
of sodium resorcinol and quinol (de Forcrand), 1892, A., 1185.
of hydrated and anhydrous salts (Pickering), 1886, T., 260; P., 161.
of salts, influence of temperature on (Tilden), 1886, A., 499; P., 66; (Pickering), 1887, T., 290; P., 20.
of salts in water (Scholz), 1892, A., 676.
of salts in different liquids (Pickering), 1888, T., 871, 875.
of supersaturated saline solutions (Bindel), 1890, A., 1042.
of selenides (Fabre), 1886, A., 961.
of alkaline silicofluorides (Truchot), 1884, A., 884.
of anhydrous sodium carbonate (Pickering), 1887, T., 73.

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Heat of solution of sodium phosphites and pyrophosphites (Amat), 1890, A., 438.

of salts of succinic and *iso*succinic acids (Tanatar), 1890, A., 320.

of sugars (Berthelot and Matignon), 1890, A., 1360.

of sulphates (Pickering), 1884, T., 686; 1885, T., 98, 100; 1886, T., 291, 306.

of modifications of double sulphates (Pickering), 1884, T., 686; 1885, P., 101; 1886, T., 1.

of sulphites (Berthelot), 1883, A., 704; (de Forcrand), 1884, A., 803.

of sulphur in different liquids (Pickering), 1888, T., 874, 877; P., 92.

of sulphuric acid solutions (Pickering), 1889, P., 86; 1890, T., 94, 165.

of *per*sulphuric acid and its salts (Berthelot), 1892, A., 931.

of sulphuric chloride (Ogier), 1883, A., 642.

of sulphurous acid (Berthelot), 1883, A., 704.

of alkaline thionates (Berthelot), 1889, A., 667.

of tartrates (Berthelot), 1891, A., 967.

of tartronic acid (Gal and Werner), 1887, A., 96; (Massol), 1892, A., 675.

of tetric acid (Berthelot), 1886, A., 8.

of urea (Rubner), 1885, A., 328.

Heat of dilution of solutions of hydrobromic acid and of the solid hydrate $HBr.2H_2O$ (Roozeboom), 1887, A., 628.

of hydrofluoric acid (Guntz), 1884, A., 544.

of solutions (Mendeléeff), 1886, A., 414.

of saline solutions (Arons), 1885, A., 1101.

of sulphuric acid solutions (Mendeléeff), 1886, A., 413.

Thermodynamics. See Thermochemistry.

Thermoelectric. See Electrochemistry.

Thermometer. See Thermochemistry.

Thermonatrite, from Vesuvius (Scacchi), 1891, A., 23.

Thetincarboxylic acids (Delisle), 1892, A., 1433.

Thialdine, action of *o*-tolylthiocarbimide and of phenylthiocarbimide on (Dixon), 1889, T., 626, 627.

Thialdine thiocyanate, decomposition products of (Marckwald), 1886, A., 864.

Thiamides, action of aldehydes on (Ephraim), 1891, A., 831.

action of alkylene bromides on (Gabriel and Heymann), 1891, A., 701.

action of ethylenediamine on (Forssell), 1891, A., 1003; 1892, A., 1247.

of aromatic acids, reduction of (Bamberger and Lodter), 1888, A., 376.

Thiazine colouring matters, production of, by electrolysis (Ewer and Pick), 1886, A., 187.

Thiazole (Hantzsch and Popp), 1888, A., 1269; (Popp), 1889, A., 724; (Hantzsch), 1892, A., 313.

compounds (Hantzsch and Weber), 1888, A., 256; (Spica and Carrara), 1892, A., 215.

derivatives from bromopyruvic acids and from ethylic bromacetoacetate (Steude), 1891, A., 742.

Thiazole, μ-amido-. See Thiazoline.

μ-bromo- and μ-chloro- (Schatzmann), 1891, A., 745.

Thiazole-α-carboxylic acid, μ-amido- (Steude), 1891, A., 743.

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Thienol, nitro- (Stadler), 1885, A., 1205.

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Thienyl hexyl ketone and **ketoxime** (Schleicher), 1886, A., 539.

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Thienyl-2:5-dimethylglyoxylic acid (Rufi), 1887, A., 805.

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Thioaceto-ψ**-cumidide** (Jacobson and Ney), 1889, A., 771.

Thio-β**-acetonaphthalide** (Jacobson), 1888, A., 1307.

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*di***Thioacetonediacetic acid** (*isopropylidenebisthioglycollic acid*) (Bongartz), 1886, A., 938.

*tri***Thioacetone-***di*- and -*tri*-**sulphones** (*triisopropylidenetrisulphone*) (Baumann and Fromm), 1890, A., 26.

*di***Thioacetophenonediacetic acid** (*phenylethylidenebisthioglycollic acid*) (Bongartz), 1886, A., 938.

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- **Thiobenzamide**, action of iodine on (v. Hofmann and Gabriel), 1892, A., 1109.
- **α-Thiobenzoic acid**, arsenic and mercury salts of (Rayman), 1887, A., 950.
- **Thiobenzophenone** (Bergreen), 1888, A., 445.
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- *di***Thiocarbamates**, aromatic (Losanitsch), 1892, A., 55.
- **Thiocarbamic chloride** (Klason), 1887, A., 1025.
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- **Tiles**, Oriental enamel on (Boeck), 1889, A., 1112.
- **Tilias**, oil from the seeds of (Mueller), 1892, A., 92.
- **Timbers**, solution for the preservation of (Wright), 1884, A., 1233.
- "**Timbo**," poisonous constituents of (Pfaff), 1891, A., 938.
- **Timboin** and **timbole** (Pfaff), 1891, A., 938.
- **Tin**, atomic weight of (van der Plaats), 1885, A., 348; (Bongartz and Classen), 1889, A., 19.
  - molecular weight of (Ramsay), 1889, T., 531, 533.
  - (metal), crystallised, allotropic modifications of (v. Foullon), 1886, A., 124.
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    - production of, from old tin plate by electrolysis (anon.), 1885, A., 941.
    - influence of various metals on the freezing point of (Heycock and Neville), 1890, T., 376.
    - lowering of the freezing point of, by the addition of other metals (Heycock and Neville), 1889, T., 667.
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- **Tin** (metal), action of chlorine on (Cowper), 1883, T., 154.
  - action of nitric acid on (Montemartini), 1892, A., 1402.
  - action of nitrosyl chloride on (Sudborough), 1891, T., 661.
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- **Tin alloys**, eutectic (Heycock and Neville), 1890, T., 386.
  - with bismuth, thermal and electrical behaviour of some, in a magnetic field (v. Ettingshausen and Nernst), 1888, A., 546.
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  - with cadmium (Laurie), 1889, T., 679.
  - triple, with cadmium and gold, freezing point of (Heycock and Neville), 1891, T., 936.
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    - estimation of lead in (Schwartz), 1888, A., 992; (Winkler), 1889, A., 309.
  - with lead and zinc (Wright and Thompson), 1890, A., 336; 1891, A., 267.
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  - with sodium (Bailey), 1892, A., 572.
  - with zinc (Laurie), 1889, T., 679.
- **Tin**, compounds of, with platinum (Schützenberger), 1884, A., 823.
  - salts (Benas), 1885, A., 728.
    - action of sodium thiosulphate on (Vortmann), 1889, A., 1109.
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- **Tin** *di*bromide (*stannous bromide*) (Rayman and Preis), 1884, A., 1265.

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  *tri*oxide (*perstannic anhydride*) (Spring), 1889, A., 1051.
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  toxic action of various (HÉRICOURT and RICHET), 1892, A., 228.
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- **Titanic iron sand** from Brazil, analysis of (Mackintosh), 1885, A., 878.
- **Titanic oxide.** See Titanium *di*oxide.
- **Titaniferous garnet** from North Carolina (Genth), 1891, A., 155.
- **Titanite.** See Sphene.
- **Titanium** (v. der Pfordten), 1887, A., 14; (Koenig and v. der Pfordten), 1889, A., 1122.
  - atomic weight of (Thorpe), 1884, A., 395; 1885, T., 108; P., 1.
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  - compounds (Koenig and v. der Pfordten), 1889, A., 947.
- **Titanium** *tetra*bromide, pure, preparation of (Thorpe), 1885, T., 126.
  - carbide in pig iron (Shimer), 1887, A., 703.
  - chloride (Wagner), 1888, A., 557.
  - *di*- and *tri*-chlorides (v. der Pfordten), 1887, A., 338.
  - *tri*chloride, reduction of (Koenig and v. der Pfordten), 1889, A., 1123.
  - *tetra*chloride (v. der Pfordten), 1887, A., 337.
    - pure, preparation of (Thorpe), 1885, T., 119.
    - molecular refraction and dispersion of (Gladstone), 1891, T., 299.
    - action of, on metals (Lévy), 1890, A., 1066.
  - fluorides, double (Piccini), 1884, A., 264; 1886, A., 670; 1891, A., 271; (Petersen), 1889, A., 107.
  - oxyfluorides of (Piccini), 1884, A., 264.
  - oxide, hydrated, from Diamantina (Gorceix), 1885, A., 640.
  - *sesqui*oxide (Koenig and v. der Pfordten), 1889, A., 1122.
    - action of nitric oxide on (Sabatier and Senderens), 1892, A., 1152.
  - *di*oxide (*titanic anhydride; titanic oxide*) in soils (McCaleb), 1888, A., 745.
    - hydrated (v. der Pfordten), 1887, A., 337.
    - crystallisation of (Hautefeuille and Perrey), 1890, A., 1071.
    - fourth form of (Hidden), 1889, A., 354.
    - distribution of, on the earth (Dunnington), 1892, A., 791.
    - action of carbon *tetra*chloride on (Demarçay), 1887, A., 329.
    - action of magnesium and hydrogen on (Winkler), 1890, A., 1375.
- **Titanium** *di*oxide (*titanic anhydride; titanic oxide*), action of magnesium on (Winkler), 1891, A., 802.
    - colour reactions of (Lévy), 1887, A., 304.
    - separation of, from alumina and ferric oxide (Cohen), 1884, A., 640.
  - *tri*oxide (Weller), 1883, A., 295; (Jackson), 1883, A., 828; (Classen), 1888, A., 424, 789; (Piccini), 1888, A., 789; (Lévy), 1889, A., 572.
  - **Titanic acids** (Piccini), 1883, A., 1056.
    - gelatinous modification of (v. der Pfordten), 1884, A., 1093.
  - **Titanic acid** (Wagner), 1888, A., 557.
    - dehydration of, by heat (Carnelley and Walker), 1888, T., 66, 81.
    - influence of, on the fusibility of refractory earths (Seger), 1884, A., 784.
    - action of sodium on (Koenig and v. der Pfordten), 1889, A., 1122.
    - oxidation of (Piccini), 1883, A., 1055.
    - as a mordant (Barnes), 1886, A., 292.
    - combination of phosphoric acid with (Hautefeuille and Margottet), 1886, A., 670.
    - *mono*-, *di*- and *tri*-chlorides (Koenig and v. der Pfordten), 1888, A., 788.
    - hydrochloride (Koenig and v. der Pfordten), 1889, A., 947.
    - phenyl-derivative of (Schumann), 1888, A., 679.
    - reaction of (Fresenius), 1886, A., 181.
    - estimation of (Lévy), 1887, A., 1064.
    - estimation of, in presence of iron (Wiegand), 1883, A., 381.
  - **Titanates**, artificial production of certain (Bourgeois), 1884, A., 564.
  - **Pertitanic acid**, fluorine derivatives of (Piccini), 1888, A., 1255.
- **Titanium** phosphates, double (Ouvrard), 1890, A., 1379.
  - sulphides (v. der Pfordten), 1884, A., 1093; 1887, A., 15; (Thorpe), 1885, T., 491; P., 69.
- **Titanium organic compounds** :—
  - cyanonitride (Reinhardt), 1888, A., 1047; (Luedeking), 1888, A., 1263.

Titanium organic compounds:—
Titanium ethyl, attempts to prepare (PATERNÒ and PERATONER), 1889, A., 591.
Titanium, detection, estimation and **separation**:—
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estimation of (WELLER), 1883, A., 381; (LÉVY), 1888, A., 196; (HILGER and HAAS), 1890, A., 666; (NOYES), 1891, A., 1295.
estimation of, in iron and its ores (LEDEBUR), 1885, A., 1160.
estimation of, in iron ores (JENNINGS), 1889, A., 189.
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estimation of, in natural silicates (HOLLAND), 1889, A., 443.
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Titanium minerals, distribution of (THÜRACH), 1886, A., 126.
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estimation of nicotine in (BIEL), 1888, A., 876; (KISSLING), 1890, A., 430.
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Tobacco ash, composition of (ROMANIS), 1883, A., 372; (ANON.), 1885, A., 927; (JORDAN; JENKINS), 1886, A., 177; (VAN BEMMELEN), 1890, A., 1338.
Tobacco smoke, toxic action of, on bacteria (TASSINARI), 1888, A., 1327.
wax-like body from (KISSLING), 1884, A., 173.
Tolallyl sulphide (BAUMANN and KLETT), 1892, A., 185.
Tolane. See Diphenylacetylene.
Tolazinedicarboxylic acid, *di*amido- (KEHRMANN), 1889, A., 1154.
p-**Tolenylamidine** derivatives (GLOCK), 1888, A., 1290.
hydrochloride (CRAYEN), 1891, A., 560.
nitrite (LOSSEN), 1892, A., 53.
Tolenylamidinebenzenyl-*o*-carboxylic acid (BISTRZYCKI), 1890, A., 969.
Tolenylamidinedimethoxybenzenylcarboxylic acid (BISTRZYCKI), 1891, A., 746.
p-**Tolenylamidine-*p*-tolenylazosulphimecarbohydrosulphide** (CRAYEN), 1891, A., 560.
p-**Tolenylamidosulphime-*p*-tolenylsulphime*di*thiocarbamate** (CRAYEN), 1891, A., 560.
o-**Tolenylamidoxime** and its derivatives (SCHUBART), 1890, A., 49.
p-**Tolenylamidoxime** and its derivatives (SCHUBART), 1886, A., 797; 1890, A., 47.
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potassium compound of, action of carbon *di*sulphide on (SCHUBART), 1890, A., 49.
3-nitro- (WEISE), 1890, A., 47.
p-**Tolenylamidoxime-ethylidene** (SCHUBART), 1890, A., 48.
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p-**Tolenylethoxime salts** (SCHUBART), 1890, A., 47.
p-**Tolenyl-imidoacetate** and **-imidoethyl ether** (GLOCK), 1888, A., 1289.
o-**Tolenylimidoximeamido-*o*-tolylidene** (STIEGLITZ), 1890, A., 255.
p-**Tolenylimidoximecarbonyl** (SCHUBART), 1890, A., 48.
p-**Tolenyl-phenyluramidoxime, -thiouramidoxime** and **-uramidoxime** (SCHUBART), 1890, A., 48.
p-**Tolhydryl-amine** (*di-p-tolylcarbinylamine*) and **-carbamide** (GOLDSCHMIDT and STÖCKER), 1891, A., 1479.

(*Toluene compounds Me* = 1.)

- **Tolidine** (*diamidoditolyl*), polymethylene bases from (SCHIFF), 1892, A., 1223.
- *o*-**Tolidine**, action of nitrous acid on (SCHULTZ), 1884, A., 903.
  - derivatives of (HOBBS), 1888, A., 708.
  - acetyl-derivatives of (GERBER), 1888, A., 484.
  - *m*-amido-, and *m*-nitro- (LOEWENHERZ), 1892, A., 852.
  - *di*nitro- (GERBER), 1888, A., 484.
- *o-m*-**Tolidine** (SCHULTZ), 1884, A., 903.
- *m*-**Tolidine**, preparation of (v. BUCHKA and SCHACHTEBECK), 1889, A., 701.
- *p*-**Tolidine**, action of nascent nitrous acid on (DENINGER), 1890, A., 38.
- **Tolidinedisulphonamide** (HELLE), 1892, A., 1468.
- *o*-**Tolidinedisulphonic acid** (GRIESS and DUISBERG), 1890, A., 60; (HELLE), 1892, A., 1466.
- **Tolidinesulphone** (GRIESS and DUISBERG), 1890, A., 60.
- **Tolidinesulphonic acid** (HELLE), 1892, A., 1467.
- *o*-**Tolidinesulphonic acid** (GRIESS and DUISBERG), 1890, A., 60.
- *p*-**Tolil** (*di-p-tolyl diketone*) (STIERLIN), 1889, A., 513.
- **Tolilbenzil**, *o*- and *p*- (*benzil, tolylimide of; phenyl tolylimidobenzyl ketone*) (BANDROWSKI), 1889, A., 147.
- *o*-**Tolilbenzoin** (*tolylimidodiphenylethylic alcohol*) (BANDROWSKI), 1889, A., 147.
- *p*-**Tolilbenzoin** (VOIGT), 1886, A., 888.
- **Tolindole.** See 3-Methylindole.
- **Toloctylamine** (*octyltolylamine; tolyloctane, amido-*), and its derivatives (BERAN), 1885, A., 524.
- *m*-**Tolualdehyde**, *o*-nitro-, and *di*nitro- (BORNEMANN), 1884, A., 1163.
- **Tolualdehydes** and their derivatives (BORNEMANN), 1884, A., 1161.
- *m*-**Tolualdehydephenylhydrazone** (RUDOLPH), 1889, A., 251.
- **Tolualloxazine** (KÜHLING), 1891, A., 1342.
- *α*-**Toluamide** (PURGOTTI), 1891, A., 59.
- *o*-**Toluamide**, reduction of (HUTCHINSON), 1890, T., 957.
  - 3:5-*di*bromo- (CLAUS and BECK), 1892, A., 1207.
- *m*-**Toluamide**, ω-chloro- (REINGLASS), 1891, A., 1344.
- *p*-**Toluamide**, 3-amido- (NIEMENTOWSKI), 1888, A., 837.
  - 2:6-*di*bromo- (CLAUS and SEIBERT), 1892, A., 176.

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- *p*-**Toluamide**, 3:5-*di*bromo- (CLAUS and HERBABNY), 1892, A., 175.
  - 3:5-bromonitro- (CLAUS and HERBABNY), 1892, A., 175.
  - 2- and 3-chloro- (CLAUS and DAVIDSEN), 1889, A., 988.
  - ω-chloro-, and ω-cyano- (MELLINGHOFF), 1890, A., 239.
  - 3-nitro- (NIEMENTOWSKI and ROZAŃSKI), 1888, A., 1088; (WEISE), 1890, A., 47.
- *p*-**Toluanilide** (LEUCKART), 1890, A., 759.
- **Toluazophenine** (FISCHER and HEPP), 1891, A., 1046.
- *p*-**Tolubenzylacetamide** (*tolylcarbinylacetamide; methylbenzylacetamide*) (KRÖBER), 1890, A., 969.
- *o*-**Tolubenzylamine.** See Methylbenzylamine.
- *p*-**Tolubenzylcarbamide** (*tolylcarbinylcarbamide; methylbenzylcarbamide*) (KRÖBER), 1890, A., 969.
- *o*-**Tolu*iso*butylthiocarbamide** (*diisobutylditolylthiocarbamide*) (EFFRONT), 1885, A., 153, 154.
- **Tolucarbostyril.** See Methylcarbostyril.
- **Toluene** (*methylbenzene*), coal-tar (MEYER), 1883, A., 1092.
  - formation of, from benzylic bromide (GLADSTONE and TRIBE), 1885, T., 453.
  - dispersive power of (BARBIER and ROUX), 1889, A., 805.
  - refractive power of, at different temperatures (PERKIN), 1892, T., 297.
  - action of the induction spark on (DESTREM), 1884, A., 1243.
  - action of heat on, and on a mixture of ethylene and (FERKO), 1887, A., 572.
  - action of amylic chlorides and amylene on (ESSNER and GOSSIN), 1885, A., 517.
  - action of chloropicrin and chloroform on, in presence of aluminium chloride (ELBS and WITTICH), 1885, A., 517.
  - action of ethylic diazoacetate on (BUCHNER and CURTIUS), 1885, A., 1208.
  - action of lead oxide on (VINCENT), 1890, A., 962.
  - action of methylenic chloride on, in presence of aluminium chloride (FRIEDEL and CRAFTS), 1884, A., 1312; 1887, A., 1102.
  - bromination of (MILLER), 1892, T., 1023.

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Toluene (*methylbenzene*), chlorination of (Seelig), 1887, A., 362.
  purest, of commerce, sulphur compound in (Meyer and Kreis), 1884, A., 46.
  halogen derivatives of (Willgerodt and Salzmann), 1889, A., 985.
    physical constants of (Seubert), 1890, A., 2.
  tetra- and *hexa*-hydrides from resin essences (Renard), 1884, A., 844.
Toluene, amido-. See Toluidine.
  *di*amido-. See Tolylenediamine.
  c-*tetra*amido-, and its sulphate (Nietzki and Roser), 1891, A., 192.
  *penta*mido- (Palmer), 1889, A., 390.
  o-bromo-, preparation and properties of (Miller), 1892, T., 1027; P., 155.
    action of chromyl dichloride on (Stuart and Elliott), 1888, T., 803.
    bromination of (Miller), 1892, T., 1031; P., 155.
    oxidation of, with potassium ferricyanide (Noyes), 1886, A., 142.
  m-bromo-, oxidation of (Noyes and Walker), 1886, A., 788.
  p-bromo-, preparation and properties of (Miller), 1892, T., 1026; P., 155.
    melting point of (Nernst), 1890, A., 3.
    action of chlorine on (Srpek), 1891, A., 44; (Errera), 1891, A., 1020.
    bromination of (Miller), 1892, T., 1032; P., 155.
  3:6-bromonitro- (Bentley and Warren), 1890, A., 485.
  2:5:4:6-*di*bromo*di*nitro- (Claus), 1888, A., 583.
  3:5-*di*bromo*tri*nitro- (Palmer), 1889, A., 390.
  o-chloro- (Seelig), 1887, A., 362.
    action of chromyl dichloride on (Stuart and Elliott), 1888, T., 803.
    sulphonation of (Wynne), 1892, T., 1072; P., 140.
  m-chloro-, sulphonation of (Wynne), 1892, T., 1075; P., 140.
  p-chloro-, melting point of (Nernst), 1890, A., 3.
    sulphonation of (Wynne), 1892, T., 1078; P., 140.
  2:3-, and 2:4-*di*chloro- (Seelig), 1887, A., 363.
  2:4-*di*chloro-, preparation of (Erdmann), 1891, A., 1462.

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Toluene, 2:5-*di*chloro- (Wynne), 1892, T., 1050; P., 139.
  3:4-*di*chloro-, preparation of (Erdmann), 1891, A., 1462.
    sulphonation of (Wynne), 1892, T., 1060; P., 139.
  2:4-, 2:5-, 3:4- and 3:5-*di*chloro- (Lellmann and Klotz), 1886, A., 452.
  2:3:4- and 2:4:5-*tri*chloro- (Seelig), 1885, A., 769.
  3:4:5-*tri*chloro- (Wynne), 1892, T., 1070; P., 139.
  *penta*chloro- (Seelig), 1885, A., 770.
  o-chloro*di*bromo-, and *di*-, *tri*- and *tetra*-chloro-*p*-bromo- (Willgerodt and Salzmann), 1889, A., 986.
  2:4-chloronitro- (Lellmann), 1884, A., 1133.
  2:5-chloronitro- (Goldschmidt and Hönig), 1887, A., 363; (Hönig), 1887, A., 1034.
  2:6-chloronitro- (Green and Lawson), 1891, T., 1017; P., 129.
  3:5-chloronitro- (Hönig), 1887, A., 1034.
  4:2-chloronitro- (Goldschmidt and Hönig), 1886, A., 1022.
  4:3-chloronitro-, and its reduction products (Gattermann and Kaiser), 1886, A., 49.
  4:2:3-, 4:2:6- and 4:3:5-chloro*di*nitro- (Hönig), 1887, A., 1034.
  2:4-*di*chloronitro- (Seelig), 1887, A., 363.
  2:3:4- and 2:4:5-*tri*chloronitro- (Seelig), 1885, A., 769.
  cyano-. See Toluonitrile.
  p-fluoro- (Paternò and Oliveri), 1884, A., 426; (Wallach), 1887, A., 130.
  o-iodo-, action of chromyl dichloride on (Stuart and Elliott), 1888, T., 803.
  ω-nitro- (Gabriel), 1885, A., 903; (Gabriel and Koppe), 1886, A., 693.
  o-nitro- (Streng), 1891, A., 1197.
    action of chlorine on, in presence of sulphur (Haeussermann and Beck), 1892, A., 1437.
    action of chromyl dichloride on (v. Richter), 1886, A., 694.
    oxidation of, by potassium ferricyanide (Noyes), 1883, A., 577.
    fractional reduction of (Miniati, Booth and Cohen), 1888, A., 202.

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Toluene, *m*-nitro-, preparation of (v. Buchka), 1889, A., 696.
  oxidation of (Noyes and Moses), 1886, A., 143.
  reduction products of (v. Buchka and Schachtebeck), 1889, A., 701.
 p-nitro-, action of chromyl dichloride on (v. Richter), 1886, A., 694.
  oxidation of, by potassium ferricyanide (Noyes), 1883, A., 577.
  fractional reduction of (Miniati, Booth and Cohen), 1888, A., 202.
  estimation of (Reverdin and De la Harpe), 1889, A., 84.
 2:4-*di*nitro-, liquid bye-product in the preparation of (Nölting and Witt), 1885, A., 1095.
 2:5-*di*nitro- (Nietzki and Guitermann), 1888, A., 471.
 2:6-*di*nitro- (Claus and Becker), 1883, A., 1093; (Staedel), 1885, A., 142.
 3:5-*di*nitro-, constitution of (Staedel), 1883, A., 865.
  preparation of (Staedel), 1883, A., 864, 865.
 2:4:6-*tri*nitro- (Claus and Becker), 1883, A., 1093.
 α-, β- and γ-*tri*nitro- (Hepp), 1883, A., 317.
  compounds of, with hydrocarbons (Hepp), 1883, A., 318.
 2:5-*di*nitroso- (Mehne), 1888, A., 463; (Nietzki and Guitermann), 1888, A., 471.

Toluene-aniline, α-*tri*nitro- (Hepp), 1883, A., 317.

Tolueneazimidotoluene (Zincke and Lawson), 1887, A., 731.

Tolueneazo-. See Azo-.

Toluenecinnamene (Wispek and Zuber), 1883, A., 977; (Kraemer, Spilker and Eberhardt), 1891, A., 207.

Toluenecyano-sulphochloride, and **-sulphonic acid** (anon.), 1890, A., 382.

Toluenedicarboxylic acid. See Methylphthalic acid.

Toluene-3:5-disulphonic acid, 2-bromo- (Kornatzki), 1884, A., 70; (Limpricht), 1885, A., 1233; (Hasse), 1886, A., 151.
 p-iodo- (Limpricht), 1885, A., 1233; (Richter), 1886, A., 152.

Toluene-2:6-disulphonic acid (Kornatzki), 1884, A., 70.

Toluenedisulphonic acids (Klason), 1887, A., 264, 491.

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Toluenedisulphonic acids, *p*-bromo-, and their derivatives (Kornatzki), 1884, A., 70; (Richter), 1886, A., 152.

Toluenedisulphothiosulphonic anhydride. See Sulphotolylic *di*sulphide.

p-**Toluenehydrazo**-*p*-**cresol** (Goldschmidt and Pollak), 1892, A., 974.

m-**Toluene-β-methylcoumarin** (v. Pechmann and Duisberg), 1884, A., 67.

Toluenenaphthalenes, *di*- and *tri*-nitro- (Hepp), 1883, A., 318.

Toluenesulphamine (Paysan), 1884, A., 454; (Heffter), 1884, A., 455.

Toluenesulphinic acids (Perl), 1885, A., 391.

Toluenesulphonamic acid (Traube), 1890, A., 1137.

Toluene-*o*-sulphonamide, 4-chloro- (Heffter), 1884, A., 73.

Toluene-*m*-sulphonamide (Noyes and Walker), 1886, A., 788.

Toluene-*p*-sulphonamide, oxidation of, with potassium ferricyanide (Noyes), 1886, A., 142.

Toluenesulphonic acid, 3-chloro-, and its amide and chloride (Wynne), 1892, T., 1075.
 2:5-*di*chloro-, and its metallic salts and amide and chloride (Wynne), 1892, T., 1051; P., 139.
 3:4-*di*chloro-, and its amide and chloride (Wynne), 1892, T., 1061; P., 139.
  hydrolysis of (Wynne), 1892, T., 1068; P., 139.
 3:4:5-*tri*chloro-, and its metallic salts and chloride (Wynne), 1892, T., 1069; P., 139.
 o-iodo- and its salts (Mabery and Palmer), 1885, A., 538.

Toluene-*m*-sulphonic acid and its derivatives (Vallin), 1887, A., 263.

Toluene-*p*-sulphonic acid and its derivatives (Vallin), 1887, A., 263.
 action of bromine on (Miller), 1886, P., 235.
 amine salts of (Norton and Otten), 1888, A., 698.
 barium salt of (Kelbe), 1883, A., 807.
 potassium salt of, bromination of (Miller), 1892, T., 1027; P., 155.
 2-bromo- (Miller), 1892, T., 1027; P., 155.
 2:3:5-*tri*bromo- (Claus and Immel), 1891, A., 1490.

Toluene-2-sulphonic acid, 4-bromo-, and its salts (de Roode), 1891, A., 1227.

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Toluene-2-sulphonic acid, 4-chloro-, and its salts (DE ROODE), 1891, A., 1227; (WYNNE), 1892, T., 1078; P., 140.

4-iodo- (*o-(β)-acid*) and its salts (DE ROODE), 1891, A., 1227.

4-fluoro- and its amide (DE ROODE), 1891, A., 1226.

4-nitro- (HAUSSER), 1891, A., 73.

Toluene-3-sulphonic acid, 4-chloro-, and its amide (WYNNE), 1892, T., 1078; P., 140.

Toluene-4-sulphonic acid, 2-bromo- (MILLER), 1892, T., 1023; P., 155.

2-chloro-, and its amide (PAYSAN), 1884, A., 73.

Toluene-5-sulphonic acid, 2-bromo-, and its amide (MILLER), 1892, T., 1030; P., 155.

2-bromo-, and its chloride, bromide and amide (WYNNE), 1892, T., 1041; P., 155.

2:3-*di*bromo-, and its salts, and chloride, bromide and amide (WYNNE), 1892, T., 1038; P., 155.

2-chloro-, and its salts and chloride and amide (WYNNE), 1892, T., 1040, 1072; P., 139, 140.

2-nitro- (LIMPRICHT), 1885, A., 1234; (FOTH), 1886, A., 153.

Toluene-ω-sulphonic acid (*benzylsulphonic acid*), derivatives of (MOHR), 1884, A., 69.

4-bromo- (JACKSON and HARTSHORN), 1884, A., 665.

Toluenesulphonic acids, isomeric, formation of (GORDON), 1888, P., 78.

Toluene-*p*-sulphonic chloride, condensation of amido-acids with (HEDIN), 1891, A., 203.

p-**Toluenesulphonic iodide** (OTTO and TRÖGER), 1891, A., 718.

Toluenesulphothiosulphonic anhydride (OTTO and TRÖGER), 1891, A., 924.

Toluenethiosulphonic acid, reactions of (OTTO and RÖSSING), 1892, A., 478.

Toluene-ω-thiosulphonic acid (*benzylthiosulphonic acid*), sodium salt of (PURGOTTI), 1890, A., 1419.

Toluenethiosulphonic acids and their salts, action of ethylic chlorocarbonate on (OTTO and RÖSSING), 1891, A., 926.

Toluenethiosulphonic thioanhydride (OTTO and TRÖGER), 1891, A., 924.

Toluic acid, nitrosulpho- (LIMPRICHT), 1885, A., 1234.

α-Toluic acid. See Phenylacetic acid.

o-**Toluic acid** (*methylbenzoic acid*) (RACINE), 1887, A., 945.

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o-**Toluic acid** (*methylbenzoic acid*), derivatives of (JACOBSEN and WIERSS), 1883, A., 1121; (RACINE), 1887, A., 945.

5-amido-, phosphate of (HÖNIG), 1886, A., 242.

4-bromo- (JACOBSEN), 1885, A., 143; (CLAUS and PIESZCZEK), 1887, A., 240; (CLAUS and KUNATH), 1889, A., 987.

5-bromo- (NOURRISSON), 1887, A., 668; (CLAUS and KUNATH), 1889, A., 987.

nitration and bromination of (CLAUS and BECK), 1892, A., 1207.

4:5- and 3:5-*di*bromo-, and 5:3-, 5:4- and 5:6-bromonitro- (CLAUS and BECK), 1892, A., 1207.

4-, 5- and 6-nitro- (JACOBSEN), 1884, A., 745.

m-**Toluic acid** (SPICA), 1883, A., 459; (MÜLLER), 1887, A., 724.

2-amido-, and its derivatives (*p-methylanthranilic acid*) (PANAOTOVIĆ), 1886, A., 361.

ω-amido- (REINGLASS), 1891, A., 1345.

4-chloro- (CLAUS), 1892, A., 1201.

ω-chloro- (REINGLASS), 1891, A., 1344.

4:6-*di*chloro- (CLAUS and BURSTERT), 1890, A., 1106.

nitro-, from nitro-*m-iso*cymene (KELBE and WARTH), 1884, A., 46.

5-nitro- (TÖHL), 1885, A., 522.

p-**Toluic acid,** 3-amido- (*m-homoanthranilic acid*) (NIEMENTOWSKI), 1888, A., 837; 1889, A., 1065; (NIEMENTOWSKI and ROZAŃSKI), 1888, A., 1088; (NOYES), 1889, A., 394; (FILETI and CROSA), 1889, A., 495.

2:3-, 2:6- and 3:6-*di*amido- (CLAUS and JOACHIM), 1892, A., 176.

2- and 3-bromo- (CLAUS and KUNATH), 1889, A., 987.

3-bromo- (FILETI and CROSA), 1889, A., 496.

2:5-*di*bromo-, and its salts (SCHULTZ), 1885, A., 1054.

2:3-, 2:5- and 3:5-*di*bromo- (CLAUS and HERBABNY), 1892, A., 175.

2:6-*di*bromo- (CLAUS and SEIBERT), 1892, A., 176.

3:6-*di*bromo- (FILETI and CROSA), 1889, A., 496; (CLAUS and BEYSEN), 1892, A., 177.

3:6-bromamido- (FILETI and CROSA), 1889, A., 495.

3:2-, 3:5- and 3:6-bromonitro- (CLAUS and HERBABNY), 1892, A., 174.

3:6-bromonitro- (FILETI and CROSA), 1887, A., 37; 1889, A., 495.

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- *p*-**Toluic acid,** 6:2- and 6:3-bromonitro- (Claus and Beysen), 1892, A., 178.
  - ω-chloro- (Mellinghoff), 1890, A., 239.
  - 2- and 3-chloro- (Claus and Davidsen), 1889, A., 988.
  - 2:6-*di*chloro- (Claus and Beysen), 1892, A., 178.
  - 3:6-*di*chloro- (Claus and Davidsen), 1892, A., 172.
  - 3:6-chloramido- (Claus and Davidsen), 1892, A., 172.
  - 2:5-chloramido- (Claus and Böcher), 1892, A., 173.
  - chlorobromo- and chlorobromonitro- (Willgerodt and Wolfien), 1889, A., 966.
  - 3:6-chlorobromo- (Claus and Davidsen), 1892, A., 173.
  - 2:3- and 2:5-chloronitro- (Claus and Böcher), 1892, A., 174.
  - 2:6-chloronitro- (Claus and Böcher), 1892, A., 174; (Claus and Beysen), 1892, A., 178.
  - 3:2-chloronitro- (Claus and Davidsen), 1892, A., 173.
  - 3:6-chloronitro- (Fileti and Crosa), 1889, A., 496; (Claus and Davidsen), 1889, A., 988; 1892, A., 172.
  - 3-chloro-2:6-*di*nitro- (Claus and Davidsen), 1889, A., 988.
  - ω-cyano- (Mellinghoff), 1890, A., 240.
  - 2-nitro- (Noyes), 1889, A., 395.
  - 3-nitro- (Niementowski and Rozański), 1888, A., 1088; (Noyes), 1889, A., 394.
  - 2:3- and 3:6-*di*nitro- (Rozański), 1890, A., 52.
  - 2:3-, 2:6- and 3:6-*di*nitro- (Claus and Joachim), 1892, A., 176.
  - 3:5-*di*nitro- (Claus and Beysen), 1892, A., 177.
  - 6:3-nitramido- (Fileti and Crosa), 1889, A., 495.
  - 2:6- and 3:6-nitramido- (Claus and Beysen), 1892, A., 177.
  - 3-sulpho-, and its derivatives (Randall), 1891, A., 1228.
  - 3-sulphamido- (Weber), 1892, A., 1092.
- **Toluic acids,** thermochemistry of (Stohmann, Kleber and Langbein), 1889, A., 1096.
- *p*-**Toluic anhydride,** 3-sulpho- (Randall), 1891, A., 1229.
- *p*-**Toluic sulphinide** ("*methylsaccharin*") (anon.), 1890, A., 382; (Randall), 1891, A., 1228; (Weber), 1892, A., 1092.

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- **Toluide,** sulpho- (*di-p-tolylsulphone*), decomposition of (Otto), 1886, A., 1031.
- **Toluidine,** last runnings obtained in the purification of (Hell and Rockenbach), 1889, A., 600.
  - naphthate and phenate (Dyson), 1883, T., 468.
- *o*-**Toluidine,** action of benzylic chloride on (Rabaut), 1892, A., 48.
  - influence of nucleal methyl on the properties of (Rosenstiehl), 1892, A., 1319.
  - and furfuraldehyde, condensation of (de Chalmot), 1892, A., 1452.
  - methylation and ethylation of (Reinhardt and Staedel), 1883, A., 578.
  - nitration of (Nölting and Collin), 1884, A., 1012.
  - sulphonation of (Claus and Immel), 1891, A., 1490.
  - chloracetate (Bischoff), 1888, A., 727.
  - hydrobromide and hydriodide (Staedel), 1883, A., 578.
  - hydrochloride, spectrum of (Hartley), 1885, T., 739.
  - ethylmalonate, action of phosphorus pentachloride on (Rügheimer and Schramm), 1888, A., 502.
  - malate (Bischoff and Nastvogel), 1890, A., 1163.
  - hydrogen sulphate (Wellington and Tollens), 1886, A., 347.
  - hydrogen diaminechromium thiocyanate (Christensen), 1892, A., 1000.
  - detection of small quantities of *p*-toluidine in (Haeussermann), 1888, A., 203.
- *o*-**Toluidine,** 5-bromo- (Alt), 1889, A., 1214.
  - chloro-, conversion of, into chlorotoluene (Wynne), 1892, T., 1047; P., 139.
    - conversion of, into *di*chlorotoluene (Wynne), 1892, T., 1049; P., 139.
  - 4-chloro- (Goldschmidt and Hönig), 1886, A., 1022.
  - 2:3:4- and 2:4:5-*tri*chloro- (Seelig), 1885, A., 769.
  - cyano-, and its salts (Bladin), 1884, A., 1142.
  - 3-nitro- (Lellmann and Würthner), 1885, A., 974.
    - action of reducing agents on (Graeff), 1885, A., 1127.

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o-**Toluidine**, 4-nitro- (Nölting and Collin), 1884, A., 1006, 1012; (Levinstein), 1885, A., 1127; (Green and Lawson), 1891, T., 1015.
  reduction of (Green and Lawson), 1891, T., 1016.
  displacement of the amido-group in, by chlorine (Green and Lawson), 1891, T., 1017; P., 129.
  derivatives of (Nölting and Collin), 1884, A., 1006.
 5-nitro- (Lellmann and Würthner), 1885, A., 974; (Green and Lawson), 1891, T., 1013.
 6-nitro- (Bernthsen), 1883, A., 579; (Green and Lawson), 1891, T., 1013.
  from liquid *di*nitrotoluene (Bernthsen), 1883, A., 579; (Ullmann), 1884, A., 1316.
  reduction of (Green and Lawson), 1891, T., 1016.
  displacement of the amido-group in, by chlorine (Green and Lawson), 1891, T., 1017; P., 129.
 3:5-*di*nitro- (Staedel), 1883, A., 865; (Barr), 1888, A., 823.
 ω-nitroso- (Meyer), 1886, A., 63.
 5-nitroso- (Mehne), 1888, A., 463.
 o-thionyl- (Michaelis), 1891, A., 717.

m-**Toluidine**, preparation of (Ehrlich), 1883, A., 54.
 nitration of (Nölting and Stoecklin), 1891, A., 692.
 4-bromo- (Claus), 1892, A., 1201.
 4-chloro- (Gattermann and Kaiser), 1886, A., 49; (Goldschmidt and Hönig), 1886, A., 1022; (Claus), 1892, A., 1201.
 5-chloro- (Hönig), 1887, A., 1034.
 6-chloro-, and its derivatives (Goldschmidt and Hönig), 1887, A., 363.
 cyano-, and its salts (Bladin), 1884, A., 1142.
 2-nitro- (Limpricht), 1885, A., 974.
  action of reducing agents on (Graeff), 1885, A., 1127.
 4-nitro- (Staedel and Kolb), 1891, A., 187.
 5-nitro- (Staedel), 1883, A., 865.
 6-nitro- (Fileti and Crosa), 1889, A., 495.
 4:6-*di*nitro- (Hepp), 1883, A., 317; (Staedel and Kolb), 1891, A., 187.
 2:4:6-*tri*nitro- (Nölting and v. Salis), 1883, A., 59.
 6-nitroso- (Mehne), 1888, A., 463.

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p-**Toluidine**, production of, from *p*-cresol (Buch), 1885, A., 147.
 spectrum of (Hartley), 1885, T., 741.
 action of benzylic chloride on (Rabaut), 1892, A., 313.
 action of bromine on, in presence of sulphuric acid (Hafner), 1890, A., 137.
 diazotised, action of, on methyl-*p*-bromaniline (Meldola and Streatfeild), 1889, T., 433.
 diazotised, action of, on methyl-*p*-chloraniline (Meldola and Streatfeild), 1889, T., 436.
 action of sulphur on (Green), 1889, T., 228.
 nitration of (Nölting and Collin), 1884, A., 1012.
 oxidation of (Klinger and Pitschke), 1885, A., 151.
 from *p*-nitrobenzaldehyde, condensation products of (Bischler), 1888, A., 287.
 citric acid derivatives of (Gill), 1887, A., 40.
 azophenine of (Nölting and Witt), 1884, A., 743.
 chloracetate (Bischoff), 1888, A., 726.
 *allo*cinnamate (Liebermann), 1891, A., 833.
 hydrate (Lewy), 1887, A., 134.
 hydrobromide and hydriodide (Staedel), 1883, A., 578.
 oxalate (Bornemann), 1890, A., 137.
 picrate (Smolka), 1886, A., 454.
 sulphate as a test for nitric acid (Longi), 1884, A., 365.
 hydrogen sulphate (Wellington and Tollens), 1886, A., 347.
 commercial, assay of (Raabe), 1892, A., 925.
 eatimation of (Schoen), 1890, A., 839.

p-**Toluidine**, 3:5-*di*bromo- (Claus and Herbabny), 1892, A., 175.
 3:5:6-*tri*bromo- (Claus and Immel), 1891, A., 1491.
 3:5-bromonitro- (Hand), 1886, A., 1018.
 3:6-bromonitro- (Claus and Herbabny), 1892, A., 174.
 chloro-, conversion of, into chlorotoluene (Wynne), 1892, T., 1058; P., 139.
 2-chloro- (Witt), 1892, A., 445.
 3-chloro- (Erdmann), 1891, A., 1466.
 2:5-chloronitro- (Claus and Böcher), 1892, A., 173.

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p-**Toluidine**, 3:5- and 3:6-chloronitro- (CLAUS and DAVIDSEN), 1892, A., 172.
  cyano-, and its salts (BLADIN), 1884, A., 1141.
  2-nitro- (BERNTHSEN), 1883, A., 579; (NÖLTING and COLLIN), 1884, A., 1012; (ULLMANN), 1884, A., 1316; (LEVINSTEIN), 1885, A., 1127.
  3-nitro- (NÖLTING and COLLIN), 1884, A., 1012.
    action of ethylenic bromide on (GATTERMANN and HAGER), 1884, A., 1142.
    action of reducing agents on (LIMPRICHT), 1885, A., 974; GRAEFF), 1885, A., 1127.
    derivatives of (GATTERMANN), 1885, A., 975.
    oxalic acid derivatives of (HINSBERG), 1883, A., 323.
  *β-di*nitro- (HEPP), 1883, A., 317.
  3:5-*di*nitro-, constitution of (STAEDEL), 1883, A., 865.
  thio-, and its derivatives (TRUHLAR), 1887, A., 472.
  thionyl- (MICHAELIS and HERZ), 1891, A., 310.
Toluidines (LEWY), 1886, A., 872.
  heat of formation of (PETIT), 1888, A., 1239.
  action of benzylic chloride on (RABAUT), 1892, A., 313.
  action of *di*brom-*α*-naphthol on (MELDOLA), 1884, T., 156.
  action of cyanogen on (BLADIN), 1884, A., 1141.
  isomeric, action of *p*-diazobenzenesulphonic acid on (GRIESS), 1883, A., 182.
  action of nascent nitrous acid on (DENINGER), 1890, A., 38.
  action of sulphur on (GATTERMANN), 1889, A., 602.
  chlorination of, and bromination of, in presence of an excess of a mineral acid (HAFNER), 1890, A., 37.
  physiological action of (GIBBS and HARE), 1890, A., 1018.
  compounds of, with cupric chloride (POMEY), 1887, A., 472.
  compounds of metallic sulphites with (DENIGÈS), 1891, A., 1031.
  compounds of, with zinc chloride (LACHOWICZ and BANDROWSKI), 1888, A., 1281.
  quantitative analysis of (MINIATI, BOOTH and COHEN), 1888, A., 202.

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Toluidines, separation of (WÜLFING), 1886, A., 1021; 1887, A., 576.
  separation of, from aniline (LEWY), 1884, A., 46.
o-**Toluidinealloxan** (PELLIZZARI), 1888, A., 682.
o-**Toluidine-3:5-disulphonic acid** (LIMPRICHT), 1884, A., 1232; (HASSE), 1886, A., 150.
p-**Toluidine-2:3- and -2:6-disulphonic acids** and their salts (RICHTER), 1886, A., 151.
o-**Toluidine-*p*-sulphinic acid** and its salts (PAYSAN), 1884, A., 454.
p-**Toluidine-*o*-sulphinic acid** and its salts (HEFFTER), 1884, A., 454.
o-**Toluidine-*p*-sulphonamide** (PAYSAN), 1884, A., 72.
p-**Toluidine-*o*-sulphonamide** (HEFFTER), 1884, A., 73.
Toluidinesulphonic acid, amido-. See Tolylenediaminesulphonic acid.
o-**Toluidinesulphonic acid**, action of nascent nitrous acid on (DENINGER), 1890, A., 39.
o-**Toluidine-4-sulphonic acid**, and 3:5-*di*bromo- (CLAUS and IMMEL), 1891, A., 1490.
o-**Toluidine-5-sulphonic acid** (HASSE), 1886, A., 150; (FOTH), 1886, A., 153; (JANOVSKY), 1888, A., 956; (CLAUS and IMMEL), 1891, A., 1490; (WYNNE), 1892, T., 1037; P., 155.
  salts of (WYNNE), 1892, T., 1037; P., 155.
  3-bromo- (CLAUS and IMMEL), 1891, A., 1490; (WYNNE), 1892, T., 1037; P., 155.
  4-iodo-, and its barium salt (LIMPRICHT), 1885, A., 1234; (FOTH), 1886, A., 153.
  3-nitro- (NIETZKI and POLLINI), 1890, A., 502.
m-**Toluidine-6-sulphonic acid** (CLAUS and IMMEL), 1891, A., 1490.
p-**Toluidine-2-sulphonic acid** (LIMPRICHT), 1885, A., 1233; (JANOVSKY), 1888, A., 956.
  3-nitro- (NIETZKI and POLLINI), 1890, A., 502.
p-**Toluidine-2- and -3-sulphonic acids**, separation of (SCHNEIDER), 1887, A., 146.
p-**Toluidine-3-sulphonic acid** (LIMPRICHT), 1885, A., 1233; (JANOVSKY), 1888, A., 956.
p-**Toluidine-5-sulphonic acid**, 2-nitro-, and its salts (LIMPRICHT), 1885, A., 1233; (FOTH), 1886, A., 152.

(*Toluene compounds Me*=1.)

p-**Toluidine-5-sulphonic acid**, 3-nitro- (Nietzki and Pollini), 1890, A., 502.
o-**Toluidine-*p*-thiosulphonic acid** (Paysan), 1884, A., 453.
p-**Toluidine-*o*-thiosulphonic acid** (Heffter), 1884, A., 454.
Toluido-. See Tolylamido-.
Toluidylmelamine (Fries), 1886, T., 742.
Toluisatin (*ditolyloxindole*) and its derivatives (v. Baeyer and Lazarus), 1886, A., 154.
Tolunaphthazines, isomeric, constitution of (Witt), 1887, A., 591.
Tolunitranilic acid (4-*nitro*-3:6-*dihydroxytoluquinone*) (Kehrmann), 1888, A., 940; (Kehrmann and Brasch), 1889, A., 969.
p-**Toluoin** (Stierlin), 1889, A., 513.
o-**Toluonitrile** from form-*o*-toluidide (Gasiorowski and Merz), 1884, A., 734.
  heats of combustion and formation of (Berthelot and Petit), 1889, A., 812.
  ω-bromo- (Drory), 1891, A., 1461.
  5-bromo- (Nourrisson), 1887, A., 668; (Claus and Kunath), 1889, A., 987.
  3:5-*di*bromo- (Claus and Beck), 1892, A., 1207.
  ω-chloro- (Gabriel and Otto), 1887, A., 1035; (Drory), 1891, A., 1460.
  di-ω-chloro- (Gabriel and Weise), 1888, A., 261.
p-**Toluonitrile** from formo-*p*-toluidide (Gasiorowski and Merz), 1884, A., 734.
  3-amido- (Niementowski), 1888, A., 837; (Glock), 1888, A., 1291.
  2-bromo- (Claus and Kunath), 1889, A., 987.
  2:6-*di*bromo- (Claus and Seibert), 1892, A., 176.
  3:5-*di*bromo- (Claus and Herbabny), 1892, A., 175.
  3:5- and 3:6-bromonitro- (Claus and Herbabny), 1892, A., 175.
  2- and 3-chloro- (Claus and Davidsen), 1889, A., 988.
  di-ω-chloro- (Gabriel and Weise), 1888, A., 261; (Reinglass), 1891, A., 1344.
  2:5-chloronitro- (Claus and Böcher), 1892, A., 173.
  3:6-chloronitro- (Claus and Davidsen), 1892, A., 172.
  3-nitro- (Leuckart), 1886, A., 351; (Niementowski), 1888, A., 837; (Weise), 1890, A., 47.

(*Toluene compounds Me*=1.)

p-**Toluonitrile,** 3:5-dinitro- (Claus and Beysen), 1892, A., 177.
Toluoylazimide (Niementowski), 1888, A., 837.
p-**Toluoyl-*o*-benzoic acid** (Friedel and Crafts), 1889, A., 242.
  *di*chloro- (Le Royer), 1887, A., 832.
o-**Toluoylcyanocamphor** (Haller), 1891, A., 1499.
p-**Toluoyl-ethylamide** and **-methylamide** (Gattermann and Schmidt), 1887, A., 358.
p-**Toluoyl-β-propionic acid** (Claus and Schlarb), 1887, A., 827; (Burcker), 1888, A., 951.
o-**Toluoyl-*o*-tolenylamidoxime** (Stieglitz), 1890, A., 255.
p-**Toluoyl-*p*-toluidide** (Leuckart), 1890, A., 759.
o-**Toluoylxylide** (Smith), 1892, A., 491.
Toluphenanthrazine, bromo- (Hartmann), 1890, A., 976.
α-**Toluphosphinic acid** and its derivatives (Weller), 1887, A., 825.
p-**Toluphosphonic acid** (Weller), 1888, A., 836.
Toluphosphonic acids, α- and β-, derivatives of (Weller), 1888, A., 835.
Toluquinaldine. See Dimethylquinoline.
2:5-**Toluquinol** (*hydrotoluquinone*) (Schniter), 1887, A., 1036.
  compounds of, with amines (Hebebrand), 1883, A., 60.
  and methyl ethers of, and their condensation products (Nietzki), 1883, A., 467.
  4:6-*di*amido- (Kehrmann and Brasch), 1889, A., 970.
  4-bromo- (Schniter), 1887, A., 1036.
  *tri*bromo- (Canzoneri and Spica), 1883, A., 331.
  β-chloro- (Schniter), 1887, A., 1036.
  *tri*chloro- (Claus and Riemann), 1883, A., 1112.
  α- and β-chlorobromo- (Schniter), 1887, A., 1036.
  3-iodo- (Kehrmann), 1889, A., 993.
  *di*nitro- (Wender), 1890, A., 752.
  4:6-*di*nitro- (Kehrmann and Brasch) 1889, A., 969.
  nitramido- (Kehrmann and Brasch), 1889, A., 970.
Toluquinoline. See Methylquinoline.
2:5-**Toluquinone** (Schniter), 1887, A., 1036.
  compound of, with *o*-nitraniline (Hebebrand), 1883, A., 61.
  3-bromo- (Claus and Jackson), 1889, A., 128.
  4-bromo- (Schniter), 1887, A., 1036.

(*Toluene compounds Me*=1.)

2:5-Toluquinone, *di*- and *tri*-bromo- (Canzoneri and Spica), 1883, A., 330.
  *tri*bromo-, action of potassium hydroxide on (Spica and Magnanimi), 1884, A., 175.
  α-chloro- (Claus and Schweitzer), 1886, A., 614.
  β-chloro- (Schniter), 1887, A.,1036.
  3:4:6-*tri*chloro- (Claus and Riemann), 1883, A., 1112.
  α- and β-chlorobromo- (Schniter), 1887, A., 1036.
  3-iodo-, and 4:6-*di*iodo- (Kehrmann), 1889, A., 993.

Toluquinonechlorimide [m.p. 88°] and its derivatives (Hirsch), 1885, A., 892.
  [m.p. 75°] (Staedel and Kolb), 1891, A., 187.

Toluquinoneoxime. See Nitroso-*o*-cresol.

Toluquinone-2:5-*di*oxime (Mehne), 1888, A., 463; (Nietzki and Guitermann), 1888, A., 471.

Toluquinone*tetr*oxime and its anhydride (Goldschmidt and Strauss), 1887, A., 809.

Toluquinoxaline. See Methylquinoxaline.

Toluric acids, *o*-, *m*- and *p*- (Gleditsch and Moeller), 1889, A., 708.

Toluthiamides, *o*- and *p*- (Gabriel and Heymann), 1891, A., 701.

Toluylene. See Stilbene.

p-**Tolyl benzyl ketone** (Strassmann), 1889, A., 883.
  oxidation of (Bucher), 1890, A., 260.
  bromo-derivatives of (Bucher), 1890, A., 260.

p-**Tolyl benzyl oxide** (Staedel), 1883, A., 585.
  nitro-derivatives (Frische), 1884, A., 1337.

p-**Tolyl *di*bromomethyl ketone** (Claus), 1890, A., 769.

Tolyl ether, preparation of, from *p*-cresol (Buch), 1885, A., 147.

Tolyl ethers, heat equivalent of (Stohmann, Rodatz and Herzberg), 1887, A., 428.

Tolyl ethyl ether. See Ethoxytoluene.

p-**Tolyl ethyl ketone**, and its nitro-derivatives (Errera), 1891, A., 1052.

p-**Tolyl glycidyl ether** (Lindemann), 1891, A., 1199.

p-**Tolyl heptadecyl ketone** (Krafft), 1888, A., 1087.

(*Tolyl compounds Me*=1.)

Tolyl methyl ether. See Methoxytoluene.

Tolyl methyl and ethyl ethylene *di*oxides (Schreiber), 1891, A., 553.

o-**Tolyl methyl ketone**, 5-bromo- and 5-chloro- (Claus), 1891, A., 911.

m-**Tolyl methyl ketone** (Essner and Gossin), 1885, A., 252; (v. Buchka and Irish), 1887, A., 826.
  6-amido- (Klingel), 1884, A., 1343; 1886, A., 60.
  4-bromo- (Schöpff), 1892, A., 338; (Claus), 1892, A., 1200.
  6-bromo- (Claus), 1891, A., 911.
  4-chloro- (Claus), 1892, A., 1201.
  6-chloro- (Claus), 1891, A., 911.

p-**Tolyl methyl ketone** (Claus and Riedel), 1886, A., 462; (Claus), 1890, A., 769.
  oxidation of (Claus and Neukranz), 1891, A., 1364.
  derivatives of (Errera), 1891, A., 1021.

m-**Tolyl methyl ketoxime**, 4-bromo- and 4-chloro- (Claus), 1892, A., 1201.

p-**Tolyl methyl ketoxime** (Claus), 1890, A., 769.

p-**Tolyl methyl pinacone** (*ditolylbutylene glycol*) (Claus), 1890, A., 769.

p-**Tolyl nitrosomethyl ketone** (Müller and v. Pechmann), 1890, A., 52.

o-**Tolyl oxide** (Gladstone and Tribe), 1886, T., 28.

p-**Tolyl pentadecyl ketone** (Krafft), 1888, A., 1087.

p-**Tolyl *di*sulphoxide** (Otto and Rössing), 1885, A., 1232.

o-**Tolyl xylyl ketone** (Smith), 1892, A., 491.

o-**Tolylacetamide**, *tri*chloro- (Cloëz), 1887, A., 1098.

m-**Tolylacetic acid** (*m-methylphenylacetic acid*), *di*nitro- (Seńkowski), 1889, A., 255.

p-**Tolylacetic acid** (Radziszewski and Wispek), 1885, A., 889; (Claus and Kroseberg), 1887, A., 949; (Strassmann), 1889, A., 883.
  preparation of (Claus and Wehr), 1891, A., 1365.
  2-*mono*nitro-, and 2:6-*di*nitro- (Claus and Wehr), 1891, A., 1365.

Tolylacetic acids (Radziszewski and Wispek), 1885, A., 889.

m-**Tolylacetylene** (*methylcinnamene; methylstyrene*), and its bromo-derivative (Müller), 1887, A., 725.

(*Tolyl compounds Me*=1.)

p-**Tolylacetylene** *di*bromide (Schramm), 1891, A., 898.

o-**Tolylacrylic acid** (*methylcinnamic acid*) (Kröber), 1890, A., 969.
  m-amido- (v. Miller and Rohde), 1890, A., 1140.

m-**Tolylacrylic acid** (Bornemann), 1884, A., 1163; 1887, A., 829; (Müller), 1887, A., 724.
  derivatives of (Müller), 1887, A., 724.
  salts of (Bornemann), 1884, A., 1163.

p-**Tolylacrylic acid** (Kröber), 1890, A., 969; (v. Miller and Rohde), 1890, A., 1140.

Tolylalanine. See Tolylamidopropionic acid.

Tolylallylsemithiocarbazides, *o*- and *p*- (Avenarius), 1891, A., 550.

p-**Tolylallylsulphone** (Otto), 1891, A., 1067.

Tolylallylthiocarbamide (Dixon), 1889, T., 622; (Prager), 1890, A., 160.

m-**Tolylamidoacetic acid** ($C_7H_7CH(NH_2)COOH$) (Bornemann), 1884, A., 1163.

o-**Tolylamidoacetic acid** (*tolylglycocine; tolylglycin*) and its derivatives (Ehrlich), 1883, A., 594; (Bischoff and Hausdörfer), 1890, A., 1285; 1892, A., 1333.
  calcium salt of (Mauthner and Suida), 1891, A., 39.

m-**Tolylamidoacetic acid,** and its derivatives (Ehrlich), 1883, A., 54.

p-**Tolylamidoacetic acid,** and its derivatives (Bischoff and Hausdörfer), 1890, A., 1284; 1892, A., 1335.
  fusion of, with alkalis (Heumann), 1891, A., 928.
  o-nitro- (Plöchl), 1886, A., 351.
  salts of (Leuckart and Hermann), 1887, A., 383.

p-**Tolylamidoacetimide** (Bischoff and Hausdörfer), 1890, A., 1284.

o-**Tolylamidoacetotoluidide** (Ehrlich), 1883, A., 593.

o-**Tolylamidoaceto**-*o*-**tolylamidoacetic acid** (Abenius and Widman), 1888, A., 824.

p-(*o*)-**Tolylamidobenzoic acid,** *m*-amido-, and *m*-nitro- (Heidensleben), 1891, A., 306.

p-(*p*)-**Tolylamidobenzoic acid,** *m*-amido- (Heidensleben), 1891, A., 306.
  m-nitro- (Schöpff), 1890, A., 374; (Heidensleben), 1891, A., 306.

α-**Tolylamidobutyric acids,** *o*- and *p*- (Bischoff and Mintz), 1892, A., 1338.

(*Tolyl compounds Me*=1.)

Tolylamido*iso***butyric acids,** α- and β- *o*- and *p*- (Bischoff and Mintz), 1892, A., 1339.

p-**Tolylamidocinnoline** (Busch and Klett), 1892, A., 1494.

Tolylamidoethylphthalimide, *o*- and *p*- (Newman), 1891, A., 1207.

p-**Tolylamido**-*p*-**methyloxindole,** and its salts (Duisberg), 1885, A., 543.

p-**Tolylamidonaphthaquinone,** *m*-nitro- (Leicester), 1890, A., 1447.

Tolylamidonaphthaquinoneditoluidide (Fischer and Hepp), 1890, A., 910.

p-**Tolylamido**-β-**naphthaquinone**-*p*-**toluidide** (Meldola), 1884, T., 159; (Brömme), 1888, A., 491.

Tolylamidoperezone, *o*- and *p*- (Mylius), 1885, A., 778; (Anschütz and Leather), 1886, T., 718.

Tolylamidophenol. See Hydroxyphenyltolylamine.

o:α-**Tolylamidopropionic acid** (Tiemann and Stephan), 1883, A., 199; (Gerson), 1887, A., 260.

p:α-**Tolylamidopropionic acid** (Tiemann and Stephan), 1883, A., 199; (Bischoff and Hausdörfer), 1892, A., 1337.
  3-nitro- (Hinsberg), 1892, A., 1359.

α-**Tolylamidopropionic acids and amides,** *o*- and *p*-, and their *tri*bromo-derivatives (Tiemann and Stephan), 1883, A., 199; (Stephan), 1887, A., 143.

p-β-**Tolylamidopropionic acid** (*p-tolyl-β-alanine*) (Bischoff and Mintz), 1892, A., 1343.

α-**Tolylamidopropionitriles,** *o*- and *p*-, *di*bromo- (Stephan), 1887, A., 143.
  and their *tri*bromo-derivatives (Tiemann and Stephan), 1883, A., 199; (Stephan), 1887, A., 143.

o-**Tolylamidopyrotartarimide** (Schiller-Wechsler), 1885, A., 901.

p-**Tolylamidotoluquinone,** *m*-nitro- (Leicester), 1890, A., 1446.

o-**Tolylamidotricarballylic acid** (Emery), 1891, A., 680.

Tolylamine. See Toluidine.

Tolylammelines (Otto), 1887, A., 1034.

Tolylanilido-. See Anilidotolyl-.

Tolylaniline, 2:4:6-*tri*nitro- (*trinitro*-3 *anilidotoluene*) (Bentley and Warren), 1890, A., 486; (Jackson and Bentley), 1892, A., 1218.

Tolylauramine salts (Fehrmann), 1888, A., 157.

p-**Tolylazimidobenzene,** amido- (Willgerodt), 1892, A., 1322.

(*Tolyl compounds Me*=1.)

Tolylazo-*m*- and -*p*-cresols, sulpho-*o*- and -*p*- (*sulphotolueneazocresols*), and salts (Nölting and Kohn), 1884, A., 901.

m-**Tolylbenzene.** See 1:3-Methyldiphenyl.

p-**Tolylbenzene** (*phenyltoluene*), derivatives of (Carnelley and Thomson), 1886, P., 258; 1887, T., 87.
  α-bromo- (Carnelley and Thomson), 1885, T., 586; P., 88; 1887, T., 87.
  α- and β-*di*bromo- (Carnelley and Thomson), 1887, T., 89.

p-**Tolylbenzenylimidoximecarbonyl** (Müller), 1890, A., 43.

p-**Tolylbenzenylthiouramidoxime** (Tiemann), 1891, A., 558; (Koch), 1891, A., 561.

m-**Tolylbenzoic acid** (Perrier), 1892, A., 851.

Tolylbenzylacetic acid, *o*-, *m*- and *p*- (Päpcke), 1888, A., 701.

p-**Tolylbenzyl*iso*butylcarbamide** (Hammerich), 1892, A., 1084.

p-**Tolylbenzylcarbamic chloride** (Hammerich), 1892, A., 1083.

p-**Tolyl-*o*-benzylenediamine** (Söderbaum and Widman), 1890, A., 1258.

Tolylbenzylic cyanides, *o*-, *m*- and *p*- (Päpcke), 1888, A., 701.

o-**Tolylbenzylideneamine** (Etard), 1883, A., 179.

Tolylbenzyl*iso*phosphine (Michaelis and Gleichmann), 1883, A., 186.

p-**Tolylbenzylsemithiocarbazide** (Dixon), 1892, T., 1022.

Tolylbenzylthiocarbamides, *o*-, *m*- and *p*- (Dixon), 1891, T., 555.

p-**Tolylbromacetic acid** (Claus and Wehr), 1891, A., 1366.

p-**Tolylbromomethyldisulphone** (Otto), 1890, A., 381.

Tolylbutane. See *iso*Butyltoluene.

Tolyl*iso*butyric acid, 6-nitro- (Effront), 1885, A., 152.

m-**Tolylcarbamide,** *di*-*o*-chloro- (Kock), 1887, A., 810.

p-**Tolylcarbamide,** and its derivatives (Pinnow), 1892, A., 460.
  *di*thio- (Truhlar), 1887, A., 473.

Tolylcarbinols, *o*- and *m*- (Colson), 1885, A., 654.

Tolylcarbinyl-acetamide and **-carbamide** (Kröber), 1890, A., 969.

p-**Tolyl-ω-chlorobenzylsulphone** (Otto), 1890, A., 380.

Tolyl*di*chloromethyldimethylcarbinol (Willgerodt and Genieser), 1888, A., 811.

(*Tolyl compounds Me*=1.)

p-**Tolylcumylcarbamide** (Goldschmidt and Gessner), 1889, A., 774.

p-**Tolyl-ψ-cumylcarbamide** (Goldschmidt and Bardach), 1892, A., 979.

o-**Tolylcyanamide** (Tiemann), 1889, A., 1165; 1890, A., 1127; (Voltmer), 1891, A., 558.

p-**Tolyldibenzylcarbamide** (Hammerich), 1892, A., 1083.

p-**Tolyldiethylphosphine** (Czimatis), 1883, A., 58.

o-**Tolyldiethylthiocarbamide** (Gebhardt), 1885, A., 383.

p-**Tolyldihydro-β-phenotriazine** (Busch), 1892, A., 734.

Tolyldihydroquinazolines, *o*- and *p*- (Paal and Busch), 1890, A., 73.

Tolyldimethyl*di*amidodiphenylmethane, *p*-nitro- (Nölting), 1892, A., 189.

Tolyldimethyl-*di*amidophenylmethane and **-diethyl*di*amidodiphenylmethane,** *p*-nitro- (Nölting), 1891, A., 727.

m-**Tolyldimethylethylmethane** (*tolylpentane*) (Essner and Gossin), 1885, A., 517.

p-**Tolyldimethylphosphine** and its derivatives (Czimatis), 1883, A., 57.

p-**Tolyldimethylpyrroline** and its dicarboxylic acid (Knorr), 1885, A., 555.

1:*o*-**Tolyl-2:3-dimethylpyrazolone** (Knorr), 1884, A., 1153.

Tolyldimethylthiohydantoins, *o*- and -*p* (Marckwald, Neumark and Stelzner), 1892, A., 150.

Tolyl-β-dimethyl-μ-thiomethoxyglyoxalines, ν-*o*- and ν-*p*- (Marckwald, Neumark and Stelzner), 1892, A., 153.

Tolyldioxamide (Schiff and Vanni), 1891, A., 908; 1892, A., 603.

Tolylene blue and red (Bernthsen and Schweitzer), 1887, A., 139; (Nietzki and Ernst), 1890, A., 1114.

Tolylenealdehydenitrodimethoxybenzenyl-*o*-carboxylic acid (Bistrzycki and Cybulski), 1892, A., 1249.

Tolylene*di*amidocyanuric chloride (Fries), 1886, T., 741.

Tolyleneauramine (Fehrmann), 1888, A., 157.

Tolylenebenzenylamidine, nitro- (Bistrzycki and Ulffers), 1892, A., 1197.

Tolylenecarbamide (Leuckart), 1890, A., 760.
  bromo- (Hartmann), 1890, A., 975.

Tolylenediallyl*di*thiocarbamide (Lellmann), 1885, A., 977.

(*Tolyl compounds Me*=1.)

- **Tolylenediamine** (*diamidotoluene*), action of ethylic chloracetate on (ZIMMERMANN and KNYRIM), 1883, A., 797.
  - physiological action of (GIBBS and REICHERT), 1891, A., 1281.
  - ferruginous pigment formed in poisoning by (ENGEL and KIENER), 1888, A., 81.
  - α- and β-*tri*chloro- (SEELIG), 1885, A., 770.
- 2:3-**Tolylenediamine** and its derivatives (LELLMANN), 1885, A., 976.
  - 4-bromo- (HÜBNER and SCHÜPPHAUS), 1884, A., 1143.
- 2:4-**Tolylenediamine** and its salts (NÖLTING and COLLIN), 1884, A., 1007.
  - conversion of, into an amidocresol and γ-orcinol (WALLACH), 1883, A., 329.
  - citrate (SCHNEIDER), 1888, A., 465.
  - *di*nitro- (NIETZKI and RÖSEL), 1891, A., 192.
  - 3:5:6-*tri*nitro- (PALMER), 1889, A., 390.
- 2:6-**Tolylenediamine** (ULLMANN), 1884, A., 1316.
- 3:4-**Tolylenediamine** (SNAPE), 1886, T., 259.
  - action of monatomic aldehydes of the fatty series on (HINSBERG), 1887, A., 816.
  - action of cyanogen on (BLADIN), 1885, A., 784.
  - action of ethylic acetoacetate on (WITT), 1887, A., 247.
  - action of ethylic chloracetate on (HINSBERG), 1886, A., 83.
  - action of formaldehyde on (FISCHER and WRESZINSKI), 1892, A., 1496.
  - derivatives of (AUTENRIETH and HINSBERG), 1892, A., 709.
  - oxalic acid derivatives of (HINSBERG), 1883, A., 323.
  - 5-bromo- (BISTRZYCKI), 1890, A., 970.
  - *di*cyano-, and its derivatives (BLADIN), 1885, A., 257.
- 3:5-**Tolylenediamine** (STAEDEL), 1883, A., 865.
- **Tolylenediamineazobenzeneazobenzenesulphonic acid** (*azosulphobenzenetoluenediamine*) (GRIESS), 1883, A., 1103.
- 3:4-**Tolylenediaminebenzylidenesulphonic acid**, sodium salt of (KAFKA), 1891, A., 721.
- 2:3-**Tolylenediamine-5-sulphonic acid** (NIETZKI and POLLINI), 1890, A., 502.

(*Tolyl compounds Me*=1.)

- 2:4-**Tolylenediamine-5-sulphonic acid** (LIMPRICHT), 1885, A., 1234; (FOTH), 1886, A., 153.
  - derivatives (LIMPRICHT), 1885, A., 1234.
- **Tolylenediamine-*p*-thiosulphonic acid** (PERL), 1885, A., 391.
- 2:4-**Tolylenedioxamethane** (*ethylic tolyldioxamate*) (SCHIFF and VANNI), 1891, A., 907; 1892, A., 603.
- **Tolylenedioxamic acid** (SCHIFF and VANNI), 1891, A., 908; 1892, A., 604.
- **Tolylenediurethane** (SCHIFF and VANNI), 1890, A., 1124.
- **Tolylene-ethenylamidine** (*ethenyltolylenediamine*) (NIEMENTOWSKI), 1886, A., 545; 1892, A., 837; (WITT), 1887, A., 247.
  - bromo- (HARTMANN), 1890, A., 976.
  - nitro- (BANKIEWICZ), 1888, A., 1184.
  - *mono*- and *di*-nitro- (BISTRZYCKI and ULFFERS), 1892, A., 1197.
- **Tolylene*iso*ethenylamidine** (*isoethenyltolylenediamine*) and its derivatives (NIEMENTOWSKI), 1892, A., 838.
- **Tolylene-ethenylethylamidine** (*ethylethenyltolylenediamine*) (HINSBERG), 1887, A., 817.
- *o*-**Tolylene-ethyldiamine** (KOCK), 1888, A., 469.
- *m*-**Tolylene-ethyldiamine** (NÖLTING and STRICKER), 1886, A., 544.
- **Tolylenemalonamide** (SCHIFF and VANNI), 1892, A., 600.
- **Tolylenemethenylamidine** (*formanhydroisodiamidotoluene*) and its bromoderivative (HÜBNER and SCHÜPPHAUS), 1884, A., 1143.
- **Tolylenemethyldiamine** (*o-amidomethyl-p-toluidine*) (BAMBERGER and WULZ), 1891, A., 1203.
- **Tolylenemethylethenylamidine** (*methylethenyltolylenediamine*) and its methiodide (NIEMENTOWSKI), 1887, A., 937.
- **Tolyleneopiamine** (BISTRZYCKI), 1888, A., 1210.
- **Tolyleneoxamide** (SCHIFF and VANNI), 1892, A., 599, 1208.
- **Tolylenephthalamidone** (BISTRZYCKI and CYBULSKI), 1892, A., 1248.
- **Tolylenepropenylamidine** (BISTRZYCKI and ULFFERS), 1890, A., 1115.
- **Tolylene-semiurethane** and **-urethane** (SCHIFF and VANNI), 1890, A., 1124.
- *m*-**Tolylene*di*thiocarbamide**, and its preparation (BILLETER and STEINER), 1886, A., 234.
- **Tolylenethiocarbamides**, *o*- and *m*- (BILLETER and STEINER), 1887, A., 367.

(*Tolyl compounds Me*=1.)

- *m*:*p*-**Tolylene-*mono*- and -*di*-thiocarbamides and their derivatives** (Lellmann), 1884, A., 49.
- **Tolylene-*mono*- and -*di*-thiocarbimides** (Billeter and Steiner), 1886, A., 234.
- *m*-**Tolylene*di*thiourethane** (Billeter and Steiner), 1887, A., 367.
- **Tolylenic diazosulphide** (Jacobson and Ney), 1889, A., 772.
- *m*-**Tolylenic di*iso*cyanate** (Snape), 1886, T., 257.
- **Tolylethenylamidine** (Wallach), 1883, A., 48.
- **Tolylethylenediamines**, *o*- and *p*- (Newman), 1891, A., 1207.
- *p*-**Tolylethylhydrazidopyruvic acid** (Hegel), 1886, A., 552.
- *p*-**Tolylethylnitrosamine** (Gastiger), 1885, A., 381.
- *o*-**Tolylethylsemithiocarbazide** (Dixon), 1890, T., 262.
- *p*-**Tolylethylsulphone** (Otto), 1885, A., 537.
- **Tolylethylthiobiuret** (Tursini), 1884, A., 1141.
- *p*-**Tolylethylthiourethane,** *o*-nitro- (Steudemann), 1884, A., 307.
- *p*-**Tolylformamidine**, cyano- (Comstock and Wheeler), 1892, A., 707.
- **Tolylfurfuryl-carbamide and -thiocarbamide** (Deutzmann), 1892, A., 43.
- **Tolylglycocine** (*tolylglycin*). See Tolylamidoacetic acid.
- *o*-**Tolylglycollic acid** (Oglialoro-Todaro and Cannone), 1890, A., 375.
- *m*-**Tolylglycollic acid** (Oglialoro-Todaro and Forte), 1891, A., 320.
- *p*-**Tolylglycollic acid,** derivatives of (Napolitano), 1883, A., 1126.
- *p*-**Tolylglyoxal hydrate** (Müller and v. Pechmann), 1890, A., 52.
- ν-*p*-**Tolylglyoxaline** (Marckwald), 1892, A., 1329.
- ν-*p*-**Tolylglyoxalyl methyl sulphide** (Marckwald), 1892, A., 1329.
- ν-*p*-**Tolylglyoxalyl-μ-mercaptan** (Marckwald), 1892, A., 1328.
- *p*-**Tolylglyoxylic acid** (v. Buchka and Irish), 1887, A., 826; (Claus and Kroseberg), 1887, A., 948; (v. Buchka), 1887, A., 949.
- **Tolylglyoxylic aldehyde** (Claus), 1890, A., 769.
- *p*-**Tolylhexyldihydrotolutriazine** (Goldschmidt and Poltzer), 1891, A., 842.
- *o*-**Tolylhydantoin** (Ehrlich), 1883, A., 1106.
- γ-**Tolylhydantoin** (Quenda), 1892, A., 828.
- *p*-**Tolylhydrazidoacetone** (Raschen), 1887, A., 956.
- *p*-**Tolylhydrazidocamphoric acid** (Chaplin), 1892, A., 1481.
- **Tolylhydrazidopyruvic acids,** *o*- and *p*- (Raschen), 1887, A., 956.
- *m*-**Tolylhydrazine** (v. Buchka and Schachtebeck), 1889, A., 702.
- *p*-**Tolylhydrazine,** action of chloroform and alcoholic potash on (Ruhemann), 1889, T., 247.
  - sulphonation of (Gallinek and v. Richter), 1886, A., 237.
  - phosphenite (Michaelis and Oster), 1892, A., 1325.
- **Tolylhydrazinedisulphonic acid** (Richter), 1886, A., 152.
- **Tolylhydrazine-*o*-sulphonic acid** (Brackett and Hayes), 1888, A., 279.
- *p*-**Tolylhydrazine-5-sulphonic acid,** 2-nitro- (Limpricht), 1885, A., 1216; (Foth), 1886, A., 153.
- **Tolylhydrazinesulphonic acids,** *o*- and *p*- (Limpricht), 1885, A., 1216.
  - action of concentrated sulphuric acid on (Schneider), 1887, A., 146.
- *p*-**Tolylhydrazo-*p*-cresetoil** (Nölting and Werner), 1891, A., 214.
- *o*-**Tolylhydrazo-*p*-cresol and *p*-tolylhydrazo-*o*-cresol** (Nölting and Werner), 1891, A., 213.
- *p*-**Tolylhydrazone** (Japp and Klingemann), 1888, T., 544.
  - thionyl- (Michaelis and Ruhl), 1890, A., 617; 1892, A., 1324.
- *p*-**Tolylhydrazophenetoil** (Nölting and Werner), 1891, A., 212.
- **Tolylhydrazonepyruvic acids,** action of heat on (Japp and Klingemann), 1888, T., 543.
- *p*-**Tolylhydrazotolyl-*mono*- and -*di*-thiobiazolone** (Freund), 1892, A., 512.
- *p*-**Tolylhydroxyethylamine** (Schreiber), 1891, A., 552.
- *p*-**Tolylic** acetate, *di*iodo- (Schall and Dralle), 1885, A., 146.
- **Tolylic** *o*-acetates, *o*-, *m*- and *p*- (Heiber), 1892, A., 308.
- *p*-**Tolylic** benzoate, *di*bromo- and *di*iodo- (Schall and Dralle), 1885, A., 146.
- **Tolylic** *di*chlorides, *iso*cyano-, *o*- and *p*- (Nef), 1892, A., 1441.
  - mercuric chlorides, *o*-, *m*- and *p*- (Michaelis and Genzken), 1884, A., 146.

(*Tolyl compounds Me*=1.)

p-**Tolylic** cinnamate, and the action of heat on (Anschütz), 1885, T., 898; A., 1064.

Tolylic cyanate, nitro- (Gattermann and Cantzler), 1892, A., 833.
  cyanates, polymerisation products of (Frentzel), 1888, A., 454.

m-**Tolylic** *iso*cyanate (Heilmann), 1891, A., 201.

Tolylic *iso*cyanides, *o*- and *p*- (Nef), 1892, A., 1441.
  cyanurates, *o*- and *p*- (Frentzel), 1888, A., 454.

p-**Tolylic** diphenylcarbamate (Lellmann and Benz), 1891, A., 1215.

Tolylic ethylxanthates, *o*-, *m*- and *p*- (Leuckart), 1890, A., 603.

p-**Tolylic** fumarate and action of heat on (Anschütz and Wirtz), 1885, T., 901; A., 1064.
  laurate, myristate, palmitate and stearate (Krafft and Bürger), 1884, A., 1125.

Tolylic phenylcarbamates, *o*- and *p*- (Leuckart), 1890, A., 760.

p-**Tolylic** phenylmethylcarbamate (Lellmann and Benz), 1891, A., 1215.

o-**Tolylic** phosphate, *di*chloro- (Stuart), 1888, T., 403; P., 24.

p-**Tolylic** phosphate (Rapp), 1884, A., 1338.

Tolylic phosphates, nitration of (Rapp), 1884, A., 1337.
  sulphide (Purgotti), 1890, A., 1420.
  *di*sulphide, sulpho- (Otto and Tröger), 1891, A., 924.
  *tetra*sulphide (Otto), 1887, A., 923.

p-**Tolylic** *s*-*di*thiocarbonate (Leuckart), 1890, A., 603.

Tolylic thiocyanates, *o*- and *p*- (Thurnauer), 1890, A., 749.

o-**Tolylic** *o*-tolylcarbamate (Gattermann and Cantzler), 1892, A., 832.

o-**Tolyl-β-imidobutyric acid** (Pawlewski), 1889, A., 1171.

Tolyl-β-imidobutyric acids, *o*- and *p*-, synthesis of (Knorr), 1884, A., 1198.

Tolylimidocarbonyl chloride (Nef), 1892, A., 1441.

o-**Tolylimidodiacetamide** (Bischoff and Hausdörfer), 1892, A., 1335.

o-**Tolylimidodiacetic acid** (Bischoff and Hausdörfer), 1890, A., 1285.
  ammonium salt of (Bischoff and Hausdörfer), 1892, A., 1335.

p-**Tolylimidodiacetic acid** (Bischoff and Hausdörfer), 1890, A., 1285; 1892, A., 1336.

(*Tolyl compounds Me*=1.)

p-**Tolylimidodiacetic ditoluidide** (Bischoff and Hausdörfer), 1892, A., 1336.

o-**Tolylimidodiacetimide** (Bischoff and Hausdörfer), 1892, A., 1335.

Tolylimidodiphenylethylic alcohols (*o*- and *p-tolilbenzoins*) (Bandrowski), 1889, A., 147.

p-**Tolylimidomethylenic ethylenic *di*sulphide** (Miolati), 1891, A., 895.

o-**Tolylindigo** (Heumann), 1891, A., 837.

p-**Tolyliodomethylsulphone** (Otto), 1888, A., 482.

p-**Tolylketodihydroquinazoline** (Paal and Busch), 1890, A., 73.

Tolylketone aldehyde (*tolylglyoxylic aldehyde*) (Claus), 1890, A., 769.

p-**Tolylketotetrahydroquinazoline** (Busch), 1892, A., 1496.

Tolylmethyldihydrophenotriazine (Goldschmidt and Poltzer), 1891, A., 841.

2′-*p*-**Tolylmethyl-3′-ethyldihydrophenotriazine** (Goldschmidt and Poltzer), 1891, A., 842.

p-**Tolyl-*p*-methyl-ψ-isatin**, derivatives of (Duisberg), 1885, A., 544.

Tolylmethylmethenyldiamine (Fischer), 1889, A., 731.

1-*m*-**Tolyl-2-*m*-methylphenyl-3-methylpyrazolone** (1:2-*di-m-tolyl*-3-*methylpyrazolone*) (v. Perger), 1886, A. 1046.

p-**Tolyl-α-methylphthalimide** (Niementowski), 1892, A., 608.

o-**Tolylmethylpropylene-ψ-thiocarbamide** (Prager), 1890, A., 160.

1-*o*- and -*p*-**Tolyl-3-methylpyrazolone** (Knorr), 1884, A., 1153.

1-*p*-**Tolyl-3-methylpyrazoloneketo-4-*p*-tolylhydrazone** (v. Buchka and Sprague), 1890, A., 29; (Sprague), 1891, T., 340.

p-**Tolylmethylsulphone** (Otto), 1885, A., 537.
  mono- and *di*-chloro- (Otto), 1890, A., 380.

Tolylmethylthiocarbamides, *o*- and *p*- (Dixon), 1889, T., 620.

o-**Tolylmethylthiohydantoin** (Marckwald, Neumark and Stelzner), 1892, A., 150.

o-**Tolyl-α- and -β-naphthylamines** (Friedländer), 1884, A., 80.

p-**Tolyl-α-naphthylamine** (Friedländer), 1884, A., 80.

p-**Tolyl-β-naphthylamine** (Friedländer), 1884, A., 80; (Witt), 1887, A., 592.

(*Tolyl compounds Me*=1.)

Tolylnaphthylenediamine (Fischer), 1892, A., 1476.

p-**Tolyl-*o*-naphthylenediamine** and its anhydro- and thio-derivatives (Fischer), 1892, A., 1473.

Tolylnaphthylic sulphides (Bourgeois), 1891, A., 1238.

m-**Tolylnitromethane** (Heilmann), 1891, A., 201.

Tolylnitrotoluenesulphazide, nitro- (Limpricht), 1887, A., 723.

Tolyloctane, amido- (*toloctylamine*) and its derivatives (Beran), 1885, A., 524.

p-**Tolylosazoneglyoxalcarboxylic acid** (Nastvogel), 1889, A., 238.

Tolyloxamethane, amido-, and nitro-. See Ethylic amido- and nitro-tolyloxamates.

o-**Tolyloxamic acid** (Mauthner and Suida), 1886, A., 886.

p-**Tolyloxamic acid**, 2-amido- (Schiff and Vanni), 1890, A., 1125; 1891, A., 833; 1892, A., 599, 601, 1208.
 3-nitro-, and its derivatives (Hinsberg), 1883, A., 323; (Schiff and Vanni), 1892, A., 601.

p-**Tolyloxamide**, nitro- (Schiff and Vanni), 1892, A., 601.

p-**Tolyl-oxamide** and **-oxanilide**, 2-amido- (Schiff and Vanni), 1891, A., 834; 1892, A., 602.

Tolyloxámides, *o*-, *m*- and *p*- (Bladin), 1884, A., 1142.

Tolyloxy-ethylamine, **-ethylaniline**, **-ethylcarbamide** and **-ethylphthalamic acid** (Schreiber), 1891, A., 552.

p-**Tolyloxyethylphthalimide**, and its *di*nitro-derivative (Schreiber), 1891, A., 552.

Tolylpentane (Essner and Gossin), 1885, A., 517.

Tolylphenyl-. See Phenyltolyl-.

o-**Tolylphthalamic acid** and its methyl derivatives (Kuhara), 1887, A., 586.

p-**Tolylphthalide** (Gresly), 1886, A., 1028.

o-**Tolylphthalimide** (Piutti), 1884, A., 453; (Kuhara), 1887, A., 586.
 preparation of (Haller), 1892, A., 1204.

1-*p*-**Tolylpiperidine** (Lellmann and Just), 1891, A., 1244.

p-**Tolylpropaldehyde** and its derivatives (v. Richter and Schüchner), 1884, A., 1342.

α-*p*-**Tolylpropaldehyde** (v. Miller and Rohde), 1890, A., 898; (Errera), 1891, A., 1020.

(*Tolyl compounds Me*=1.)

m-**Tolylpropiolic acid** (Müller), 1887, A., 725.

o-**Tolylpropionic acid** (*o-methylhydrocinnamic acid*) (Young), 1892, A., 1221.

m-**Tolylpropionic acid** [m.p. 125°] (Effront), 1885, A., 152.
 nitro- (Effront), 1885, A., 152.

m-**Tolylpropionic acid** (*m-methylhydrocinnamic acid*) [m.p. 40°] (Müller), 1887, A., 724.

p-**Tolylpropionic acid** (*p-methylhydrocinnamic acid*) (Kröber), 1890, A., 969.

α-*p*-**Tolylpropionic acid** (*methylhydratropic acid*) (v. Miller and Rohde), 1890, A., 978, 1140; (Errera), 1891, A., 1021; (Errera and Baldracco), 1892, A., 605.
 m-*di*amido- and *m*-*di*nitro- (Errera and Baldracco), 1892, A., 606.

Tolylpropionic acid. See also Methylhydrocinnamic acid.

α-*p*-**Tolylpropionitrile** (Errera), 1891, A., 1021.

α-*p*-**Tolylpropylene** (Errera), 1885, A., 772.

β-*p*-**Tolylpropylene** (Errera), 1891, A., 1021.

Tolylpropylene-ψ-semithiocarbazides, *o*- and *p*- (Avenarius), 1891, A., 550.

o-**Tolylpropylene-ψ-thiocarbamide** (Prager), 1890, A., 160.

α-*p*-**Tolylpropylic alcohol** (Errera), 1891, A., 1021.

p-**Tolyl-*n*-** and **-*iso*-propylnitrosamines** (Hori and Morley), 1891, T., 34.

1-**Tolylpyrazoles**, *o*- and *p*- (Balbiano), 1889, A., 1216.

1-**Tolylpyrazolethylammonium iodides**, *o*- and *p*- (Balbiano), 1889, A., 1216.

1-**Tolylpyrazolines**, *o*- and *p*- (Balbiano), 1889, A., 1216.

p-**Tolylpyrrolinedibenzoic acid** (Baumann), 1887, A., 736.

3′-*m*-**Tolyl*iso*quinoline** (Heilmann), 1891, A., 202.
 1′-chloro- (Heilmann), 1890, A., 625; 1891, A., 202.

3′-*p*-**Tolyl*iso*quinoline** and 1′-chloro- (Ruhemann), 1892, A., 474.

p-**Tolylrosinduline** and *iso*-*p*-**tolylrosinduline** (Fischer and Hepp), 1890, A., 909.

Tolylsemicarbazides, *o*- and *p*- (Pinner), 1888, A., 687.

Tolylstibine, and its derivatives (Michaelis and Genzken), 1884, A., 1135.

(*Tolyl compounds Me*=1.)

Tolylsulphone (Purgotti), 1890, A., 1420.

p-**Tolylsulphoneacetic acid** (Otto), 1885, A., 537.

p-**Tolylsulphoneacetone** (R. and W. Otto), 1888, A., 282.

p-**Tolylsulphone-ethyl** and **-ethylamine derivatives** (Otto and Damköhler), 1885, A., 538.

α-*p*-**Tolylsulphonepropionic acid** (Otto), 1890, A., 382.
  preparation of the ethyl salts of (Otto), 1885, A., 537.

Tolylsulphophenylbenzenylamidine (Wallach), 1883, A., 48.

p-**Tolyltetrahydroquinazoline** (Paal and Busch), 1890, A., 73.

p-**Tolyltetrahydrothioquinazoline** (Busch), 1892, A., 1496.

Tolylthiazolines, *μ*-*o*-, and *μ*-*p*- (Gabriel and Heymann), 1891, A., 701.

Tolylthiobiuret, and its acetyl-derivative (Tursini), 1884, A., 1140.

Tolyl*di***thiocarbamic acids**, salts of (Losanitsch), 1892, A., 56.

m-**Tolylthiocarbamide**, *di*-*o*-chloro- (Kock), 1887, A., 810.

p-**Tolylthiocarbamide**, action of acetic anhydride on (Werner), 1891, T., 403.
  2-nitro- (Steudemann), 1884, A., 307.
  thio- (Truhlar), 1887, A., 473.

Tolylthiocarbazinic *o*- and *p*-**tolylhydrazides**, *o*- and *p*- (Freund), 1892, A., 511.

o-**Tolylthiocarbimide**, preparation of (Werner), 1891, T., 402.
  action of aldehyde-ammonia on (Dixon), 1888, T., 418.
  action of, on thialdine (Dixon), 1889, T., 626.

m-**Tolylthiocarbimide**, preparation of (Werner), 1891, T., 403.

p-**Tolylthiocarbimide**, preparation of (Werner), 1891, T., 404.
  oxide (Helmers), 1887, A., 581.
  nitro- (Steudemann), 1884, A., 307.

Tolyl*di***thiocarbimide** (Hobbs), 1888, A., 708.

o-**Tolylthiocarbimide-aldehyde-ammonia** (Dixon), 1892, T., 520.

o-**Tolylthiohydantoin** (Marckwald, Neumark and Stelzner), 1892, A., 150.

p-**Tolylthiourethane**, *o*-nitro- (Steudemann), 1884, A., 307.

o-**Tolyltoluenesulphazide** (Limpricht), 1887, A., 723.

(*Tolyl compounds Me*=1.)

1:4-*o*-**Tolyl**-*p*-**tolyldiketopyrazine**, 3:6-*di*chloro- (Abenius), 1890, A., 526.

p-**Tolyl-2:4-tolylenediamine** (*amidoditolylamine*) (Fischer and Sieder), 1891, A., 434.

p-**Tolyl-3:4-tolylenediamine**, formation of, from *p*-ditolylhydrazine, and its derivatives (Täuber), 1892, A., 853.

p-**Tolyl**-*o*-**tolyleneguanidine** (Keller), 1891, A., 1470.

Tolyl-*p*-and-*o*-**tolylsemithiocarbazides**, *o*- and *p*- (Dixon), 1892, T., 1015.

Tolyltrimethylphosphonium *per*iodide (Czimatis), 1883, A., 57.

Tolylurazoles, *o*- and *p*- (Pinner), 1888, A., 687.

Tolylurethane, amido- (Schiff and Vanni), 1892, A., 600; (Schiff), 1892, A., 1203.
  4-nitro- (Schiff and Vanni), 1892, A., 601.

Tomato, cooked, composition of (Williams), 1892, T., 227.

Tomatoes, composition and anatomical structure of the fruit of (Briosi and Gigli), 1891, A., 955; (Passerini), 1891, A., 956.

Tonometer, differential (Bremer), 1888, A., 402.

Topaz, Brazilian, liquid inclusions in (v. Nordenskiöld), 1886, A., 674.
  from Maine, U.S. (Bradbury), 1884, A., 27; (Clarke and Diller), 1886, A., 213.
  from Pike's Peak, Colorado (Cross and Hillebrand), 1883, A., 1065.
  from Tasmania (v. Groddeck), 1886, A., 603.
  from the Thomas range, Utah (Alling), 1887, A., 453.
  in rhyolite (Cross), 1886, A., 991.
  pyroelectricity of (Friedel and Curie), 1885, A., 469.
  See also Aluminium silicofluorides.

Torpedo, chemical studies on (Weyl), 1887, A., 1128.

Torpedo-mucin (Weyl), 1887, A., 1128.

Tortoise, urine of the (Mills), 1887, A., 170.

Tourmaline from Bohemia (Katzer), 1888, A., 923.
  blue, from Chapey (Michel-Lévy), 1886, A., 214.
  from Japan (Wada), 1885, A., 222.
  from New South Wales (Liversidge), 1886, A., 774.
  black, from North Carolina (Hidden and Des Cloizeaux), 1887, A., 118.

Tourmaline from Schüttenhofen, constitution and colour of (Scharizer), 1889, A., 764.
  red, from Siberia (Prendel), 1892, A., 573.
  from Tasmania (v. Groddeck), 1886, A., 603.
  chromic, in the Urals (Cossa and Arzruni), 1883, A., 444.
  composition of (Riggs), 1888, A., 659; (Jannasch and Kalb), 1889, A., 472; (Rammelsberg; Kalb), 1891, A., 24.
  formula of (Wülfing), 1889, A., 765; (Kenngott), 1892, A., 1410.
  effect of heat on the optical properties of (Doelter), 1885, A., 26.
  thermal conductivity of (Stenger), 1885, A., 5.
Tourmaline-bearing copper ores from Chili (v. Groddeck), 1890, A., 114.
Tourmalinic-pegmatite from Ričan (Katzer), 1889, A., 357.
Toxalbumin secreted by the microbe of blennorhagic pus (Hugounenq and Eraud), 1891, A., 1521.
Toxicological investigations (Hess and Luchsinger), 1885, A., 578; (Lecco), 1886, A., 743; 1891, A., 864; (Marino-Zuco), 1889, A., 653; (Ciotto and Spica), 1891, A., 772.
  See also Physiological action and Poisoning.
  and chemical relations of some fungi (Böhm), 1885, A., 1008.
Trachyte of Gleichenberg, action of water containing carbonic acid on (Clar), 1884, A., 569.
Trachytes of the Eperies-Tokay mountains (Roth), 1886, A., 131.
Trachyte-dolerites of the Vogelsberg (Ledroit), 1887, A., 904.
Trachyte-region of the Rhodope (Pelz and Hussak), 1884, A., 414.
Transfusion of mixtures of blood and salt solution (Marshall), 1891, A., 347.
Transition point (Roozeboom), 1888, A., 1147.
  and point of fusion (van't Hoff), 1888, A., 404.
  points, triple and multiple points regarded as (Roozeboom), 1888, A., 1151.
Translocation, diastase of (Brown and Morris), 1890, T., 509.
Transpiration (Chabrié), 1892, A., 1267.
  and assimilation, relation between the, produced by chlorophyll (Jumelle), 1890, A., 190.
Transportation of solids in a vacuum by the vapours of metals (Morse and White), 1892, A., 1386.
Trees. See Agricultural Chemistry.
Trehalose. See Carbohydrates.
Tremolite (*grammatite*) from Nordmarken (Flink), 1889, A., 221.
  chemical composition of (Berwerth), 1886, A., 28.
  crystallographical examination of (Primics), 1885, A., 733.
Triacetic acid, δ-lactone of, and its reactions (Collie), 1891, T., 607; P., 114.
  preparation of pyridine derivatives from (Collie and Myers), 1892, T., 721; P., 131.
Triacetin (*triacetylglycerol*) (Seelig), 1892, A., 289.
  preparation of (Böttinger), 1891, A., 1183.
Triacetonealkamine (*hydroxytetramethylhexahydropyridine*) (Fischer), 1883, A., 1153.
  preparation of (Fischer), 1884, A., 1290.
ψ-**Triacetonealkamine** (Fischer), 1884, A., 1290.
Triacetoneamine (Fischer), 1884, A., 1290.
  action of phosphorus *penta*chloride and oxychloride on (Fischer), 1883, A., 790.
  homologues of (Fischer), 1884, A., 1290.
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p-**Xylaldiphenylmaleide** (Cohn), 1892, A., 482.

m-**Xylal-phthalide** and **-phthalimidine** and their nitro-derivatives, and *iso*-**xylal-phthalide** and **-phthalimidine** (Heilmann), 1890, A., 625; 1891, A., 200.

p-**Xylal-phthalide** and **-phthalimidine** and their nitro-derivatives, and *iso-p*-**xylal-phthalide** and **-phthalimidine** (Ruhemann), 1892, A., 473.

Xylalphthalnitronitrite (Heilmann), 1890, A., 625.

Xylan (*wood-gum*) (Hoffmeister), 1886, A., 955; (Wheeler and Tollens), 1889, A., 847; (Allen and Tollens), 1891, A., 659.
  from straw, etc. (Allen and Tollens), 1890, A., 472.

Xylene tetrahydride from resin essences (Renard), 1884, A., 844.
  glycols. See Dihydroxyxylenes.
  amido-. See Xylidine.
  *di*amido-. See Xylylenediamine.

o-**Xylene** (*dimethylbenzene*), spectrum of (Hartley), 1885, T., 702.
  action of bromine on, in presence of aluminium (Blümlein), 1885, A., 163.
  oxidation of (Claus and Pieszczek), 1887, A., 240.
  derivatives of (v. Baeyer and Pape), 1884, A., 898; (Leser), 1884, A., 1313; (Claus and Groneweg), 1891, A., 921.

o-**Xylene**, 4-bromo- (Jacobsen), 1885, A., 142.
  ω-*di*bromo- (*xylylenic bromide*) (v. Baeyer and Perkin), 1884, A., 752; (Colson), 1884, A., 1000.
    action of ammonia on (Scholtz), 1891, A., 1353.
  4:5- and 3(?):4-*di*bromo- (Jacobsen), 1885, A., 142; (Koch), 1890, A., 1247.

o-Xylene, Me:Me = 1:2; *m*-xylene, Me:Me = 1:3; *p*-xylene, Me:Me = 1:4.

- *o*-**Xylene**, *tetra*bromo- (Jacobsen), 1885, A., 142.
  - 4:5:3-*di*bromonitro- and 4:5:3:6-*di*bromo*di*nitro- (Töhl), 1886, A., 57.
  - 3-chloro- (Krüger), 1885, A., 1053.
  - 4-chloro- (Claus and Kautz), 1885, A., 972; (Krüger), 1885, A., 1053; (Claus and Groneweg), 1891, A., 921.
  - ω-*di*chloro- (Colson), 1884, A., 1000.
  - β-*di*-, *tri*- and *tetra*-chloro- (Claus and Kautz), 1885, A., 972.
  - ω-*tetra*chloro- (Hjelt), 1886, A., 143.
  - ω-*tetra*- and ω-*penta*-chloro- (Colson and Gautier), 1886, A., 613.
  - 4:5-chlorobromo-, 4:5:3-*di*chlorobromo-, 4:5-chlorobromonitro- and 4:5-chloronitro- (Claus and Groneweg), 1891, A., 921.
  - 4:5:3:6-*di*chloro*di*nitro- (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1201.
  - ω-*di*iodo- (Leser), 1884, A., 1314.
- *m*-**Xylene**, spectrum of (Hartley), 1885, T., 704.
  - action of methylenic chloride on, in presence of aluminium chloride (Friedel and Crafts), 1887, A., 1102.
  - derivatives of (Colson), 1884, A., 1313; (Ahrens), 1892, A., 1437.
  - behaviour of, in the animal system (Gleditsch and Moeller), 1889, A., 708.
- *m*-**Xylene**, 2:4:6-*tri*amido- (Grevingk), 1885, A., 144.
  - ω-*di*bromo- (Colson), 1884, A., 1313; (Kipping), 1888, T., 26.
  - 2:4-*di*bromo-, and its derivatives (Jacobsen), 1889, A., 39.
  - 4:6-bromonitro- (Ahrens), 1892, A., 1437.
  - 4:2:6-bromo*di*nitro- (Lellmann and Just), 1891, A., 1245.
  - 4-chloro- (Jacobsen), 1885, A. 1052; (Claus and Burstert), 1890, A., 1105.
  - 2:4-*di*chloro- (Koch), 1890, A., 1248.
  - 4:6-*di*chloro- (Claus and Burstert), 1890, A., 1106; (Koch), 1890, A., 1248.
    - orientation of (Claus and Runschke), 1890, A., 1246.
    - amido-, bromo- and nitro-derivatives of (Claus and Runschke), 1890, A., 1247.
  - 2:4:6-*tri*chloro- (Claus and Burstert), 1890, A., 1106.
- *m*-**Xylene**, 2:4:5:6-*tetra*chloro- (Claus and Burstert), 1890, A., 1106; (Koch), 1890, A., 1248.
  - ω-*tetra*- and *hexa*-chloro- (Colson and Gautier), 1886, A., 613.
  - 2:4:5:6-*di*chloro*di*bromo- (Koch), 1890, A., 1248.
  - 4:6-chloronitro- (Ahrens), 1892, A., 1437.
  - 4:6:2:5-*di*chloro*di*nitro- (Koch), 1890, A., 1248.
  - 4-fluoro- (Töhl), 1892, A., 968.
  - fluoronitro- (Ahrens), 1892, A., 1437.
  - 4-iodo-, action of sulphuric acid on (Hammerich), 1890, A., 1106.
  - 4:6-*di*iodo- (Hammerich), 1890, A., 1107.
  - 6:4-iodonitro- (Ahrens), 1892, A., 1437.
  - 2-nitro- and 2:4-*di*nitro- (Grevingk), 1885, A., 144.
  - nitrocyano- (Ahrens), 1892, A., 1437.
- *p*-**Xylene** in Galician petroleum (Pawlewski), 1885, A., 1126.
  - spectrum of (Hartley), 1885, T., 707.
  - commercial, ethylbenzene in (Nölting and Palmer), 1891, A., 1197.
  - ethylin, action of phosphoric chloride on (Colson), 1885, A., 252.
- *p*-**Xylene**, 2-bromo- (Jacobsen), 1885, A., 144, 518; (Jannasch), 1885, A., 251.
  - ω-*di*bromo- (Kipping), 1888, T., 34.
    - action of fuming nitric acid on (Löw), 1885, A., 1208.
  - 2:5-*di*bromo-, preparation and properties of (Moody and Nicholson), 1890, T., 974.
    - and its transformation by means of sulphuric acid (Koch), 1890, A., 1247.
    - solid, oxidation products of (Schultz), 1885, A., 1053.
  - 2:6-*di*bromo- and *tetra*bromo- (Jacobsen), 1885, A., 518.
  - chloro- and 2:5-*di*chloro- (Kluge), 1885, A., 1208.
  - ω-*tetra*-, ω-*penta*- and ω-*hexa*-chloro- (Colson and Gautier), 1886, A., 613.
  - *mono*-, *di*- and *tri*-chlorobromo-, chloro-*di*- and -*tri*-bromo- and *di*chloro*di*bromo-, and their derivatives (Willgerodt and Wolfien), 1889, A., 965.
  - 2:5-*di*chloro*di*nitro- (Kluge), 1885, A., 1208.

o-Xylene, Me:Me = 1:2; *m*-xylene, Me:Me = 1:3; *p*-xylene, Me:Me = 1:4.

p-**Xylene**, 2-nitro-, oxidation of (Noyes), 1889, A., 394.
  2:3- and 2:6-*di*nitro-, crystallographic examination of (Barner), 1883, A., 179.
  2:3-, 2:5- and 2:6-*di*nitro-, constitution of (Lellmann), 1885, A., 973.
  2:3:6-*tri*nitro- (Nölting and Geissmann), 1886, A., 344.
  2:5-*di*nitroso- (Pflug), 1890, A., 607.
Xylenes (Colson), 1884, A., 1000.
  coal-tar, English and Scotch (Levinstein), 1884, A., 898.
  preparation of (Colson), 1885, A., 654.
  molecular refraction and dispersion of (Gladstone), 1891, T., 295.
  action of aluminium chloride on (Heise and Töhl), 1892, A., 1309.
  derivatives of the three isomeric (Radziszewski and Wispek), 1885, A., 889.
  three, in coal-tar, analytical estimation of (Reuter), 1884, A., 1431.
  separation of the (Crafts), 1892, A., 1134.
Xyleneazo-. See under Azo-.
m-**Xylenecarboxylic acid**, *di*nitroso-, and nitronitroso- (Claus), 1890, A., 980.
Xylenecinnamene. See Xylenestyrene.
Xylenediamine. See Xylylenediamine.
p-**Xylene-ω-dicarboxylic acid**. See *p*-Phenylenediacetic acid.
Xylenedicarboxylic acids. See Cumidic acids.
m-**Xylene-2:4-disulphone-ethylamide** (Wischin), 1891, A., 74.
o-**Xylene-4:6(?)-disulphonic acid** (Pfannenstill), 1892, A., 1341.
m-**Xylene-2:4-disulphonic acid** (Wischin), 1891, A., 73; (Pfannenstill), 1892, A., 1340.
  6-bromo- and 6-chloro- (Wischin), 1891, A., 74.
m-**Xylene-2:6(?)-disulphonic acid** (Pfannenstill), 1892, A., 1340.
p-**Xylene-2:6(?)-disulphonic acid** and its derivatives (Holmes), 1891, A., 1374; (Pfannenstill), 1892, A., 1341.
m-**Xylenephthaloylic acid**, ammonium salt of, crystalline form of (Soret), 1886, A., 619.
Xylenestyrene (*xylenecinnamene*). See Phenyltolylpropane.
m-**Xylenesulphonamic acid** and its salts (Traube), 1890, A., 1137.
o-**Xylene-4-sulphonamide** (Jacobsen), 1885, A., 143.
p-**Xylene-2-sulphonamide**, 5-(?)bromo- (Jacobsen), 1885, A., 144.
  3:6-*di*bromo-, and its reduction (Moody and Nicholson), 1890, T., 977.
o-**Xylene-3-sulphonic acid**, 6-chloro- (Krüger), 1885, A., 1053.
o-**Xylene-4-sulphonic acid**, 5-bromo-, and its salts (Jacobsen), 1885, A., 143.
  5-chloro- (Krüger), 1885, A., 1053.
m-**Xylene-2-sulphonic acid** and its derivatives (Moody), 1888, P., 77; 1891, P., 189.
m-**Xylene-4-sulphonic acid** and its derivatives (Moody), 1888, P., 77; 1891, P., 189.
  nitration products of (Claus and Schmidt), 1886, A., 708.
  oxidation of (Limpricht), 1885, A., 1235.
  *di*amido- and 6-bromonitro- and their salts (Limpricht), 1885, A., 1234.
  5-bromo- (Nölting and Kohn), 1886, A., 356.
  6-iodo- (Bauch), 1891, A., 73.
  2-, 5- and 6-*mono*- and 2:6- and 5:6-*di*-nitro- (Claus and Schmidt), 1886, A., 708.
p-**Xylene-2-sulphonic acid**, 5(?)-bromo- (Jacobsen), 1885, A., 144.
  5-bromo- (Nölting and Kohn), 1886, A., 356; 1889, A., 611.
  3:6-*di*bromo-, and its salts (Moody and Nicholson), 1890, T., 976.
Xylenesulphonic acids, action of bromine on aqueous solutions of (Kelbe and Stein), 1886, A., 1032.
p-**Xylene-2-sulphonic chloride**, 3:6-*di*bromo- (Moody and Nicholson), 1890, T., 977.
Xylenol ethers, heat equivalent of (Stohmann, Rodatz and Herzberg), 1887, A., 428.
  amido-, and its hydrochloride (Pfaff), 1883, A., 918.
  nitro-, and its derivatives (Pfaff), 1883, A., 802, 918.
o-3-**Xylenol** (Töhl), 1886, A., 57; (Nölting and Forel), 1886, A., 58.
  *tri*bromo- (Töhl), 1886, A., 57.
o-4-**Xylenol**, 3:5-*di*nitro- (Nölting and Pick), 1889, A., 129.
m-2-**Xylenol** (Jacobsen), 1889, A., 41.
m-4-**Xylenol** (Smith, Coutts and Brothers), 1886, T., 23; (Jacobsen), 1886, A., 345.
m-5-**Xylenol** (Töhl), 1885, A., 522.
p-2-**Xylenol**, 5-amido- (Sutkowski). 1887, A., 668.

o-Xylene, Me:Me=1:2; *m*-xylene, Me:Me=1:3; *p*-xylene, Me:Me=1:4.

p-2-**Xylenol**, ω-*di*bromo- (Adam), 1884, A., 1329.
  5-nitro-, ethyl salt of (Nölting, Witt and Forel), 1886, A., 58.
  5-nitroso-. See *p*-Xyloquinoneoxime.
m-4-**Xylenol-5-sulphonic acid** (Limpricht), 1885, A., 1234; (Sartig), 1886, A., 153.
m-4-**Xylenol-6-sulphonic acid**, 2- or 5-nitro- (Limpricht), 1885, A., 1234; (Sartig), 1886, A., 154.
Xylenyl-amidoxime and its derivatives, **-azoxime-ethenyl**, **-imidoximecarbonyl** and **-uramidoxime** (Oppenheimer), 1890, A., 49.
Xylic (*xylylic*) **acids**. See Dimethylbenzoic acids.
m-**Xylidene-aniline** and **-phenylhydrazine** (Bornemann), 1884, A., 1162.
Xylidine, commercial (Staedel and Hölz), 1886, A., 145.
  zinc chloride (Martini), 1892, A., 1455.
  hydrobromides (Staedel), 1883, A., 578.
  hydrochlorides, action of methylic alcohol on (Nölting and Forel), 1886, A., 58.
  naphthate (Dyson), 1883, T., 471.
  cyano- (Senf), 1887, A., 929.
o-3-**Xylidine** (*amidoxylene*) (Töhl), 1886, A., 57; (Nölting and Pick), 1889, A., 131; (Menton), 1891, A., 1203.
  salts of (Töhl), 1886, A., 57.
  4:5-*di*bromo- (Töhl), 1886, A., 57.
o-4-**Xylidine** and its derivatives (Jacobsen), 1884, A., 737; (Müller), 1887, A., 663.
  5-chloro- (Claus), 1892, A., 1202.
m-2-**Xylidine**, nitration of (Nölting and Stoecklin), 1891, A., 692.
m-4-**Xylidine** (Müller), 1887, A., 663.
  action of benzylic chloride on (Jablin-Gonnet), 1892, A., 314, 1320.
  nitration of (Nölting and Collin), 1884, A., 1013.
  anhydro-bases of (Gudeman), 1888, A., 1282.
  compounds of metallic sulphides with (Denigès), 1891, A., 1031.
  2-nitro-, and its acetyl derivative (Grevingk), 1885, A., 144.
m-5-**Xylidine** (Töhl), 1885, A., 522.
  methylation of (Limpach), 1888, A., 464.
  carbamate, cyanate and cyanurate (Frentzel), 1889, A., 241.
p-2-**Xylidine** (Nölting, Witt and Forel), 1886, A., 57; (Pflug), 1890, A., 606.
  preparation and properties of (Witt), 1889, A., 603.
  *di*amido- (Witt, Nölting and Forel), 1889, A., 604.
  3:5-*di*bromo- (Nölting and Kohn), 1886, A., 356.
  5 chloro- (Kluge), 1885, A., 1208.
  5-nitro- (Nölting, Witt and Forel), 1886, A., 58; (Witt), 1889, A., 604.
  thio-base from (Anschütz and Schultz), 1889, A., 603.
o-**Xylidines** (Jacobsen), 1884, A., 737; 1886, A., 235.
  nitration of (Nölting and Stoecklin), 1891, A., 692.
m-**Xylidines**, action of diazo-*p*-nitrobenzene salts on (Meldola), 1883, T., 428.
Xylidines, consecutive (Wroblewski), 1886, A., 145.
  six isomeric and some of their derivatives (Nölting and Forel), 1885, A., 381; 1886, A., 58.
  separation of (Witt), 1886, A., 699.
m-4-**Xylidine-5-sulphonic acid** (Nölting and Kohn), 1889, A., 611.
  constitution of (Panajotow), 1887, A., 382.
m-4-**Xylidine-5(?)-sulphonic acid** and its salts (Jacobsen and Ledderboge), 1883, A., 593; (Sartig), 1886, A., 153.
m-4-**Xylidine-6-sulphonic acid** and its salts (Sartig), 1886, A., 153; (Nölting and Kohn), 1886, A., 355.
  2- or 5-nitro- (Limpricht), 1885, A., 1234.
p-2-**Xylidine-5-** and **-6-sulphonic acids** (Nölting and Kohn), 1886, A., 355; 1889, A., 611.
m-**Xylidoethylphthalimide**. See Xylylamidoethylphthalimide.
Xylitol (Fischer and Stahel), 1891, A., 668; (Bertrand), 1892, A., 28.
  constitution of (Bertrand), 1892, A., 29.
  *penta*nitrate (Bertrand), 1892, A., 29.
m-**Xylobenzaldehyde** (Hinrichsen), 1889, A., 131, 391.
m-**Xylo-benzylamine** and **-benzylic alcohol** (Hinrichsen), 1889, A., 131.
Xylonic acid (Allen and Tollens), 1891, A., 668.
o-**Xylo-3:6-quinol** (*dimethylquinol*) (Nölting and Forel), 1886, A., 58.

o-Xylene, Me:Me = 1:2; *m*-xylene, Me:Me = 1:3; *p*-xylene, Me:Me = 1:4.

o-**Xylo-3:6-quinol** (*dimethylquinol*) 4:5-*di*chloro- (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1201.

m-**Xylo-2:5-quinol** (Nölting and Forel), 1886, A., 58.
  4:6-*di*chloro- (Claus and Runschke), 1890, A., 1247.

p-**Xylo-2:5-quinol** (Nietzki), 1883, A., 467.
  oxidation of (Heymann and Koenigs), 1887, A., 1035.

Xyloquinoline. See Dimethylquinoline.

o-**Xylo-3:6-quinone** (1:2-*dimethyl*-3:6-*quinone*) (Nölting and Forel), 1885, A., 382; 1886, A., 58.
  4:5-*di*chloro- (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1201.

m-**Xylo-2:5-quinone** (Nölting and Forel), 1885, A., 382; 1886, A., 58.
  4:6-*di*chloro- (Claus and Runschke), 1890, A., 1247.

p-**Xylo-2:5-quinone** (*phlorone*) and its derivatives (Nietzki), 1883, A., 467; (Nölting and Forel), 1885, A., 382; (Goldschmidt and Schmid), 1885, A., 775.

p-**Xylo-2:5-quinonedioxime** (Sutkowski), 1887, A., 668; (Pflug), 1890, A., 607.

p-**Xylo-2:5-quinoneoxime** (5-*nitroso*-*p*-2-*xylenol*) and its derivatives (Goldschmidt and Schmid), 1885, A., 775; (Sutkowski), 1887, A., 667; (Pflug), 1890, A., 607.

m-**Xyl-4:6-orcinol** (*dihydroxyxylene*) (Pfaff), 1883, A., 918; (v. Kostanecki), 1887, A., 39.

m-**Xyl-4:6-orcinol-5-carboxylic acid** (v. Kostanecki), 1887, A., 39.

Xylose. See Carbohydrates.

Xylosecarboxylic acid (Fischer), 1890, A., 1399.

o-**Xylyl** *iso***butylbenzyl ketone** (Wege), 1892, A., 338.

m-**Xylyl ethyl ketone** (Claus), 1891, A., 564.

p-**Xylyl ethyl ketone** (Claus and Fickert), 1887, A., 253.

o-**Xylyl methyl ketone** (Claus and Claussen), 1886, A., 463; (Claus), 1890, A., 770.
  5-chloro-, and derivatives (Claus), 1891, A., 912; 1892, A., 1201.

m-**Xylyl methyl ketone** (Claus and Gärtner), 1886, A., 463.
  6-amido- (Claus), 1890, A., 980.

m-**Xylyl methyl ketone,** 2- and 6-nitro- and 2:6-*di*nitro- (Claus), 1890, A., 980.

p-**Xylyl methyl ketone** and its derivatives (Claus and Wollner), 1885, A., 1136; (Errera), 1891, A., 1053.
  5-bromo- (Schöpff), 1892, A., 338.

m-**Xylyl nitrosomethyl ketone,** 2:6-*di*nitro- (Claus), 1890, A., 981.

m-**Xylyl pentadecyl ketone** (Krafft), 1888, A., 1087.

o-**Xylylacetamide** (Strassmann), 1888, A., 474.

Xylylacetic acid (*dimethylphenylacetic acid*), 4-nitro-, and its salts (Wispek), 1883, A., 1096.

m-**Xylylacetic acid** (Poppe), 1890, A., 499.

o-**Xylylamide** (Harris), 1890, A., 158.

m-**Xylylamide** (Harris), 1890, A., 158; (Gattermann and Rossolymo), 1890, A., 975.

α-*m*-**Xylylamidoacetic acid** and its ether (Ehrlich), 1883, A., 594.

Xylylamidoacetoxylidide (Ehrlich), 1883, A., 594.

m-**Xylylamidoethylphthalimide** (Newman), 1891, A., 1208.

m-**Xylylamidomethane** (Hinrichsen), 1889, A., 131, 391.

Xylylamine. See Methylbenzylamine and Xylidine.

Xylyl- and *iso***xylyl-anilide** (Leuckart), 1890, A., 759.

Xylylantipyrine (Klauber), 1891, A., 1363.

m-**Xylylbenzamidomethane** (Hinrichsen), 1889, A., 391.

Xylylbutane. See *iso*Butylxylene.

o-**Xylylcarbamide** (Strassmann), 1888, A., 474.

m-**Xylylcarbamide** (Brömme), 1888, A., 1296; (Frentzel), 1889, A., 241.

m-**Xylylcarbinol** (Hinrichsen), 1889, A., 131.

p-**Xylyl-*p*-cymylphenylmethane** (Elbs), 1887, A., 942.

Xylyldiethylphosphine (Czimatis), 1883, A., 58.

1-*m*-**Xylyl-2:3-dimethylpyrazolone** (Klauber), 1891, A., 1363.

Xylyldiphenylamides (Lellmann and Bonhöffer), 1887, A., 935.

o-**Xylylene diethyl ether** (Leser), 1884, A., 1313.

p-**Xylylenebismethylhydroxy-*m*-diazine** (Glock), 1888, A., 1291.

o-**Xylylene-3-6-diamine** (*diamidoxylene*), 4:5-*di*chloro- (Claus, Raps, Herfeldt and Berkefeld), 1891, A., 1201.

o-Xylene, Me:Me=1:2; *m*-xylene, Me:Me=1:3; *p*-xylene, Me:Me=1:4.

o-**Xylylene-ω-diamine** and its salts (Strassmann), 1888, A., 475.
m-**Xylylene-2:4-** and **-4:6-diamine** (Grevingk), 1885, A., 145.
m-**Xylylene-4:6-diamine,** reactions of (Witt), 1888, A., 1186.
m-**Xylylene-5:6-diamine** (Jacobsen), 1889, A., 39.
m-**Xylylene-ω-diamine** (Brömme), 1888, A., 1296.
p-**Xylylene-2:5-diamine** (Nölting, Witt and Forel), 1886, A., 58; (Sutkowski), 1887, A., 668.
Xylylenediaminesulphonic acid (Limpricht), 1885, A., 1234.
o-**Xylylenedianilide** (Leser), 1884, A., 1313.
Xylylenedimalonic acids, *m*- and *p*- (Kipping), 1888, T., 31, 38.
m-**Xylylenediphthalimide** (Brömme), 1888, A., 1296.
Xylylenemethyldiamine (Pflug), 1890, A., 607.
o-**Xylylenephthalimide** and chloro- (Strassmann), 1888, A., 475.
Xylylenic bromide. See Xylene, ω-*di*bromo-.
o-**Xylylenic *di*bromide** (Perkin), 1888, T., 5.
Xylylenic cyanides, *m*- and *p*- (Kipping), 1888, T., 41, 44.
  diazosulphide (Jacobson and Ney), 1889, A., 772.
  oxide, *tetra*chloro- (Graebe), 1887, A., 832.
  sulphides (Hjelt), 1890, A., 134.
o-**Xylylenic sulphide** (Leser), 1884, A., 1313.
m-**Xylylethylenediamine** (Newman), 1891, A., 1208.
α-*m*-**Xylylethylamidoacetic acid** (Ehrlich), 1883, A., 594.
o-**Xylylethyl*di*chlorodimalonic acid,** synthesis of (v. Baeyer and Perkin), 1884, A., 908.
m-**Xylylfurfuryl-carbamide** and **-thiocarbamide** (Deutzmann), 1892, A., 43.
m-**Xylylglycollic acid** (Poppe), 1890, A., 499.
ν-*m*-**Xylyl-glyoxaline, -glyoxalyl-μ-mercaptan** and **-glyoxalyl-μ-methylic sulphide** (Marckwald), 1892, A., 1329.
o-**Xylylglyoxylic acid** (v. Buchka and Irish), 1887, A., 826.
m-**Xylylglyoxylic acid** (Claus and Gärtner), 1886, A., 463; (Claus), 1891, A., 564.
  6-nitro-, 2:6-*di*nitro- and *di*nitroso- (Claus), 1890, A., 979.
p-**Xylylglyoxylic acid** and its salts (Claus and Wollner), 1885, A., 1136.
m-**Xylylhydrazine** (Klauber), 1890, A., 1410; 1891, A., 1362.
Xylylhydrazinesulphonic acid, sodium salt of (Klauber), 1890, A., 1410.
m-**Xylylhydroxyacetic acid** (Claus), 1890, A., 979; 1891, A., 564.
p-**Xylylhydroxyacetic acid** (Claus and Wollner), 1885, A., 1137; (Claus), 1891, A., 564.
o-**Xylylic cyanide** (v. Baeyer and Pape), 1884, A., 898.
m-**Xylylic ethylxanthate** (Leuckart), 1890, A., 603.
p-**Xylylic phosphorus chlorides** (Weller), 1887, A., 824; 1888, A., 835.
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"*p*-**Xylyl-β-ketonic acid**" (Claus and Fickert), 1887, A., 253.
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m-**Xylyl-malonanilide** and **-malonic acid** (Poppe), 1890, A., 498.
o-**Xylylmethylcarbinol** (Claus), 1890, A., 770.
m-**Xylylmethylcarbinol** (Claus), 1890, A., 979.
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1:*m*-**Xylyl-3-methylpyrazolone** (Klauber), 1891, A., 1363.
o-**Xylylmethylsulphine iodide** (Hjelt), 1890, A., 135.
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m-**Xylyloxamic acid** (*oxalylxylidic acid*) and its inner anhydride (Mauthner and Suida), 1889, A., 140.
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p-**Xylyl-phosphinous acid** and **-phosphonic acid** and its nitro-derivative (Weller), 1888, A., 835.
o-**Xylyl-phthalamic acid** and **-phthalimide** (Strassmann), 1888, A., 474.
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m-**Xylylthiocarbamide** (BRÖMME), 1888, A., 1296.

o-**Xylylthiocarbimide** (STRASSMANN), 1888, A., 475.

m-**Xylylthiocarbimide** (BRÖMME), 1888, A., 1296.
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